

HB

171

.7

.M4

The Library Book on
ECONOMICS
—
HARRISON HUGHASTON



Class HB 171

Book .7

Copyright N^o .M4

COPYRIGHT DEPOSIT.

The Brevity Book on
ECONOMICS

EDITORIAL BOARD

CHARLES MANFRED THOMPSON, Chairman,
Professor of Economics, University of Illinois.

EDWARD BRUCE MOON,
Director of Merchants' Service Bureau,
Orange Judd Publications.

CHARLES F. ABBOTT,
Director of Sales, The Celluloid Company,
New York.

JOHN B. SWINNEY,
Organization Director, Retail Research Association,
New York.

HARRY A. WHEELER,
Vice-President, The Union Trust Co.,
Chicago; Former President, The United
States Chamber of Commerce.

The Brevity Book on ECONOMICS

By

HARRISON McJOHNSTON

*Author of the Modern Business Text
on Business Correspondence, Alexander
Hamilton Institute.*

BREVITY PUBLISHERS

Plymouth Building

CHICAGO

1919

HB171
7
M4

PREFACE

This book is a simplified statement of the essential principles of Economics as accepted by representative economists. Its aim is to give the reader, in return for a minimum amount of his time and effort, a good working knowledge of this underlying science of business.

Harrison McJohnston

Chicago, Illinois,
July 1, 1919

SEP -8 1919

Copyrighted, 1919, by
Harrison McJohnston
All rights reserved

©Cl.A530854

CONTENTS

CHAPTER	PAGE
I The Aims of Economics.....	1
II Price and Price Changes.....	6
III Domestic and Foreign Trade.....	19
IV Domestic and Foreign Exchange.....	29
V The Production of Wealth.....	53
VI The Consumption of Wealth.....	53
VII The Distribution of Wealth.....	61
VIII Special Problems of Economics.....	69
Appendix—Classified References.....	77
Index	85

The Brevity Book on ECONOMICS

CHAPTER I

The Aims of Economics

Economics is a scientific study of man's efforts in satisfying his wants for material things and services. It is an underlying science of business. The entire business world is the laboratory of the economist.

The economist is mainly interested in promoting the material well-being of society *as a whole*. He aims to help improve the general standard of living and to promote better distribution of wealth and income. His task is to study scientifically all the essential factors involved in the promotion of national and world prosperity. To him, prosperity means an abundance of economic goods for distribution and abundant opportunity for all to possess and enjoy the good things of life.

Very few economists oppose the individual's right to possess private property; but they all challenge abuses of this fundamental institution, wherein public welfare is sacrificed to the gain of individuals. Because business activities are now so thoroughly cooperative, society must have *public* rights—designed to make individual rights more valuable and more equitable. Public ownership of highways, of waterways, of schools, and of similar "public utilities" which can clearly render better service when owned by all the people, is now generally advocated. But *all* the costs should be considered before making extensions of public ownership. Government ownership and regulation are treated in Chapter III with the question of monopoly.

Economists commonly emphasize the advantages of free and open competition as a fundamental incentive to econ-

omic progress—when competitive trade is conducted fairly and within the bounds of good public policy. Brisk trade is considered to be a chief source of general prosperity, and intelligent regulation of trade is generally believed to be necessary. The extent of state “interference” in the policies and methods of business has always been a bone of contention among the economists of various schools.

Historically, economists are divided into several schools. Prior to the time of Adam Smith—whose “Wealth of Nations,” 1776, ushered in the Classical School—the Mercantilists, mainly in England, and the French Physiocrats were the chief schools of economic thought.

The Mercantilists held that national prosperity depended mainly upon accumulating a large stock of gold and silver. They therefore advocated strict state regulation of industry and commerce, designed primarily to increase exports and to decrease imports of *merchandise*, and thus to help increase imports of gold and silver. The Physiocrats were inclined to look upon agriculture alone as truly productive, excluding the work of merchants, traders, professional men, and the like; while the Classical School taught that manufacturing and trade, as well as agriculture, were productive.

The leading economists of the Classical School were Adam Smith, Thomas Robert Malthus, David Ricardo, and John Stuart Mill. They lived in the last half of the eighteenth century and the first half of the nineteenth.

Adam Smith is often called “the father of political economy.” There is no distinction between “economics” and “political economy”; the latter being the name given to this science by the early economists. “Economics” comes from a Greek word which means household economy. “Political” was added in order to distinguish household from state economy.

The economists of the Classical School emphasized in particular the so-called *laissez-faire* (let-things-alone)

principle, believing in freedom of business enterprise, and particularly in freedom of the individual from the dictation of the state. They therefore advocated free trade—a movement which became so strong that England about the middle of the nineteenth century adopted her free-trade policy. This was a decided change from the attitude of the mercantilists who gave individual enterprise very little freedom from state supervision. The Classical School believed that “intelligent self-interest,” operating under conditions of free, fair, and open competition, would most effectively foster aggressive production and equitable distribution of wealth.

Modern economists have reacted against the Classical School’s extreme opposition to governmental “interference.” The trend of economic thought, for at least thirty or forty years, has been toward greater state regulation of production and trade. Except for this one important point, however, most of the thought of the classical economists remains in modern economics; and a very large part of modern economic thought may be traced to the classical economists. Adam Smith, for example, pointed out clearly the productive advantages of specialization, or division of labor, which is the most marked and fundamental characteristic of modern large-scale production.

Later schools of economic thought, however, have modified somewhat and have greatly supplemented the thought of the classical economists. The Historical School, arising in Germany about the middle of the nineteenth century, reacted against the abstract methods of the Classical School, claiming that economic inquiry should be concerned mainly with historical facts. The Austrian School, sometimes called the Psychological School, has made an intensive analysis of human wants. This school developed the principles of “marginal utility” explained in the first part of the next chapter.

Because of their outlook into the future, some econ-

omists have been called optimists and others pessimists. The "optimistic school" is essentially a reaction against pessimistic forecasts, of which the views of Malthus are representative. In his "Theory of Population," 1798, Malthus maintained that population tends to increase faster than the food supply; and the generally bad living conditions of common labor in England in the middle of the nineteenth century seemed to verify the Malthusian doctrine. Since then, however, the standard of living of the laboring classes has undoubtedly improved, with a marked decrease in the relative number of the very poor in nearly all countries. Never more than today have we been so much interested in bettering the living conditions of the poorer classes.

Economics has never been a "closet philosophy." Economists have always been interested in practical affairs. Adam Smith was keenly interested in the business men of his own town in Scotland. David Ricardo had made a fortune in business before he was forty years of age. But nearly all economists, until recently, confined themselves mainly to public problems. Today, however, they are becoming more and more interested in current business problems, such as the major problems of organization, finance, marketing, and accounting.

Although economists now, more than ever, try to help solve the practical problems of individual business concerns, the broader problems that affect all business are still the primary problems of economics—to make plain, for instance, the true relation of capital to labor, and the relation of capital and labor to the welfare of the general public.

The number of business and professional men who now recognize the practical value of this science is increasing rapidly. Leading business men now more than ever see the importance of a scientific study of business in general, apart from consideration solely of the welfare of a single business enterprise. They recognize the

increasing interdependence of all commerce and industry, and of the several classes in society.

The study of modern economics helps the individual business man in many ways. It aids him in exercising independent judgment of the best means and methods of solving many current business problems—problems of money, credit, and banking, of domestic and foreign trade and the tariff, of government ownership and regulation of industry and commerce, of transportation, of business and public finance, of social reforms; in short, all the major problems of the business world. Perhaps the business man's most important direct use of a thorough knowledge of economic laws and principles, however, is in helping him to forecast fundamental changes in business conditions.

Almost all these changes in business conditions have something to do with prices and markets. Everywhere and at all times we are face to face with alterations in relative values, revealed in changing prices. Modern economists therefore occupy themselves largely with a study of the fundamental causes and effects of changes in prices.

CHAPTER II

Price and Price Changes

Price is value expressed in money. The value of a commodity or service, as expressed by its price, arises from its utility and scarcity. *Utility*, in Economics, means power to satisfy want. Economic *scarcity* exists when the amount of any commodity or service is less than sufficient to satisfy all want for it. Air and water, for example, are seldom *scarce* commodities. At certain times and places, and in some forms, air and water are, of course, economically scarce. But, as a whole, they are "free goods." They are indispensable, but they do not have *exchange* value; they do not have a *price*. Both utility and scarcity are requirements in all commodities that are bought and sold.

The satisfaction of human wants is the ultimate aim of economic activities; and the possible development of the number and variety of human wants seems to be almost without limitation. But any single want is capable of being completely satisfied.

If a person is hungry and, for example, has a few apples, all about alike, the first apple he eats will yield him greater utility or want-satisfying power than the second apple he eats; the second will yield greater utility than the third; and so on until his want is completely satisfied. This is the principle of diminishing utility: *each successive unit of any commodity, as consumed, yields less and less utility in satisfying a single want.*

If a person has, say, three apples, and the satisfaction of his own immediate hunger alone is considered, it is obvious that any one of his three apples will be worth no more to him than the third apple to be eaten. Its value measures the value of each of the other two; for if he should sell or give away or lose one of his three apples, it would be the amount of satisfaction he would get from

eating the third apple that he would lose. Thus the value of the last unit consumed in a stock of goods measures the value of each of the other units. This last unit to be consumed—the “least important” unit—is called the *final* or *marginal* unit of supply; and the fact that the value of the final unit to be consumed measures the value of the other units, is called *the principle of final or marginal utility*.

These principles of diminishing and final utility help somewhat in explaining the law of supply and demand. The greater the stock of any commodity, relative to the amount wanted or demanded, the less the value of the final unit of that commodity to be consumed, according to the principle of diminishing utility; and the value of this final or marginal unit measures the value of each of the other units, according to the principle of final or marginal utility. Therefore, the value of any unit in the total stock of any commodity, such as wheat or corn or cotton, tends to go down when the stock increases relative to the amount wanted, and up when the stock decreases. If the amount wanted increases or decreases relative to the stock, the effect upon the price is the same as an opposite change in stock relative to want.

These tendencies imply freedom of choice and freedom of competition. Entirely free and open competition implies that all bids and offers are known to all buyers and sellers, also that each buyer is competing with all other buyers and that each seller is competing with all other sellers. This condition of entirely free and open competition seldom exists, but it is a helpful supposition in the study of market price.

The *market* for any commodity may be technically defined as the area in which one price prevails for that commodity; or it may be defined as the area wherein the main factors which determine this one price, operate. Under free competition, a market price is the prevailing

or generally current price which results from the bids and offers of competing buyers and sellers.

All buyers who are willing to buy at the market price, but would not buy if the price were any higher, are known as the *marginal buyers*. All sellers who would not sell if the market price were any lower, are known as the *marginal sellers*. All other sellers, who would be willing to sell if the price were lower, gain what is sometimes called *seller's* or *producer's surplus* when they sell at the market price; and all other buyers, who would buy even if the price were higher, gain *buyer's* or *consumer's surplus* when they buy at the market price.

Buyers will not knowingly pay more than the market price, nor will sellers knowingly sell for less than the market price. Yet, rather than fail to buy all they want of a commodity or service, many buyers would be willing to pay more than the current market price; and many sellers, rather than fail to sell all they want to sell, would be willing to sell for less than the current market price. Therefore, if demand at the market price falls off for any reason, some sellers will lower their price in order to get ahead of other sellers; and if supply at the market price falls off for any reason, some buyers will raise their bids in order to get ahead of other buyers or to tempt more sellers into the market. Thus relative changes in supply and demand at the current market price are reflected by changes in the bids and offers of buyers and sellers. These bids and offers cause the market price both to be what it is at any one time and to change from time to time.

It is necessary to remember that supply and demand are different at different prices. The amount of any commodity or service offered at the current market price is called the *effective* supply; the amount demanded at that price is the *effective* demand. The amount that would be offered or demanded at any other than the market price is known as *potential* supply or demand.

The movement of the market price for any commodity, under freely competitive conditions, is toward the point which equals the cost of production to marginal producers—those whose costs of production are highest. If the price falls below this point, the marginal producers will suspend production, and will probably transfer their attention to the production of some other commodity the market price of which will be more likely to yield them a satisfactory profit. A new set of marginal producers will then be in the market. But if the market price yields the marginal producer a relatively wide margin of profit, additional producers are attracted into the industry. They increase the supply—and the market price tends to fall. This tendency of the market price, in a competitive industry, to travel toward and to remain at the point which equals the cost of production of marginal producers—plus the least acceptable profit to them—is the *law of normal competitive price*. Fixing prices for the service of public utilities—railroad rates, for example—upon the basis of cost plus a reasonable profit, is recognition of the law of normal competitive price.

While the market price tends to be established by the bids and the offers of marginal producers and sellers, and tends to move toward the normal competitive price, as explained above, lack of complete information on the part of both buyers and sellers, and lack of free competition among buyers and among sellers, particularly among sellers, cause the market price of many commodities to vary from the normal competitive price.

Monopoly, representing various kinds and degrees of unified control of supply—or of demand in exceptional cases—affects in some degree the market price of many commodities. Economic monopoly exists when this unified control is sufficient to enable the monopolist, usually by manipulating supply, to cause the market price to be above or below the normal competitive level.

Monopoly, however, may or may not result in a high

price; that is to say, in a price higher than the normal competitive price. Unified control of supply, as in the case of city electric light and power service, may result in savings which permit even a lower price than would be the case were two or more companies competing for trade. In many other industries one large monopolistic company may enjoy many economies which enable it to make a lower price than could be made when several smaller competing companies are operating; and this lower price may yield the company its greatest possible net profit. This result, however, would depend upon the relative cost per unit of product when different quantities are produced, and the extent to which low prices would bring greater demand.

Virtually every producer faces conditions of either decreasing, or increasing, or constant cost; meaning that the cost per unit of product either decreases, increases, or remains constant with increases in the quantity produced in any one period of time. The monopolist tries to discover the price which will yield him the greatest net profit. He wants to know how various prices will affect demand, and how various quantities produced in any period of time will affect the cost per unit of product. Is demand *elastic* or *inelastic*? If inelastic—if demand would not differ very much at different prices, as in the case of table salt—he would probably fix a relatively high price. If elastic, as in the case of nearly all commodities, the monopolist would want to fix his price at the point where the number of units demanded at that price, multiplied by the net profit per unit, would yield him the best total. Thus the “best” monopoly price would be fixed with a view toward anticipating its effect upon all the factors which would cause present and future changes in the cost per unit of product and in the character and quantity of demand, including the effect upon potential competition. These factors are innumerable. Many of them cannot be anticipated. Usually the monopolist’s method of fixing his

most profitable price is experimental. Other aspects of monopoly are treated in the next chapter.

In competitive as well as in monopolistic industries, the problem of producing the most profitable quantity is often difficult, especially so when production within the industry as a whole tends to vary a great deal from season to season, and when demand, at any particular price, is somewhat uncertain. The risk of over-production and therefore of loss from a fall in the market price, causes producers in many competitive industries to be careful in their forecasts of the total demand for and supply of their products. Speculation, explained later on, and other indications of future demand relative to supply are of extreme importance to producers in competitive industries.

Even though many conditions prevent competition from being entirely free and open, changes in the ratio of supply and demand are either a primary cause or a primary result of changes in prices. *The essential condition of any change in price is a change in the ratio of supply and demand.*

Prices are relative to one another, and the price of one commodity is "sympathetically" related to the prices of other commodities. A change in the price of cotton affects the price of wool; and a change in the price of wool affects the price of cotton. In all cases wherein one commodity may be, to some extent, substituted for another, an increase or a decrease in the stock of one tends to affect the price of the other the same as an increase or a decrease in the stock of the other—in so far as the two commodities are satisfactory substitutes one for the other. There is also a connection between the prices of complementary goods such as lumber and paint; or of "goods-in-series," such as iron ore and steel and the many products made of steel. An increased demand for lumber sooner or later increases the demand for paint; while an increased demand for, say, steel ships increases the demand for steel which increases the demand for iron ore—tending to cause the prices of all three to increase.

As yet, however, economists have not studied intensively the various kinds and degrees of "sympathy" between goods of various classes and their respective prices. Only general relationships have been observed. But economists have given a great deal of attention to the causes of changes in the general level of prices. We know that the prices of almost all commodities have sometimes risen and fallen together. Index numbers are used to indicate these changes in the general price level. The average price of a large number of basic commodities during some past period, usually some decade, such as 1880 to 1890, is chosen as a standard price level and is represented by 100. The ratio that the current price level—or the price level for any other time or period—bears to the standard price level, is expressed by a number which bears the same ratio to 100. If the current price level, for instance, is twice as high as the standard, it would be indicated by 200, which would be the so-called index number of the current price level.

Why do all prices in general tend to rise or fall together over long periods of time? Does the law of supply and demand, as it affects the prices of all commodities, explain this satisfactorily, or does the dollar *itself* change in value?

It is commonly believed that the purchasing power of a dollar bears a definite relation to the quantity of gold in the country, because a dollar represents a fixed amount of gold and because gold is the basis of our active supply of money and credit. It is believed that the value of a dollar tends to vary with changes in the amount of money-and-credit in circulation. Obviously it would take a greater amount of money-and-credit to put through the same amount of purchases at higher prices—unless the money-and-credit were to circulate faster during the period of time involved; for an increase in the rapidity of circulation of money-and-credit operates the same as an increase in the amount of them in cir-

ulation. It is not necessarily true, however, that the greater the available supply of money-and-credit, the less will be the value of the dollar. But the available supply of money-and-credit and its rapidity of circulation seem to have considerable influence upon the rise and fall of prices in general—through the effect upon the demand for and the supply of commodities and services of all kinds.

The ease with which business men can make loans, or otherwise find capital for expansion, affects the general demand for goods of almost all kinds. For example, the pronounced rise in prices during the war was caused primarily by the increased demand for many kinds of goods required for conducting the war. Circulating credit was greatly expanded to enable contractors to buy materials and labor to take care of war orders. These contractors, partly as a result of their "cost-plus" contracts, were able to bid up prices of many materials and of many kinds of labor. All other industries were forced to bid against them—and this was the *primary* cause of the general rise of prices. Our increased gold supply permitted a great increase in bank credit available for business uses, making it easier for buyers to secure working capital—and to bid up prices on the supplies of materials and labor which were so urgently needed. Increased demand for labor, caused in part by a decreased supply of labor on account of enlistment, forced up the price of labor in nearly all industries, and gave labor more money for the purchase of merchandise at higher prices.

It seems to be true, however, that generally rising prices over relatively long periods of time, such as the steadily rising prices from 1896 to 1914, were caused mainly by our increasing production of gold and by improvement in our use of gold as the basis of our supply of money-and-credit in circulation.

It is commonly believed that the present increase in the amount of bank credit available for use is largely permanent. Consequently, it seems reasonable to expect the

increase in the general price level to be permanent—in so far as the amount of money and of credit instruments in circulation shall remain proportionately the same as it is today. But, as explained later on in Chapter IV, prices in various countries tend to seek the same level. It is a world rather than a national question. Even after considerable deflation of credit in many European countries, there will doubtless remain there a permanent increase in bank credit. Most economists feel, therefore, that we may expect a permanent increase in the general price level as compared with the level of prices in 1914. Just how much prices in general will eventually fall from their high level and just when the general price level will begin to fall, seem to be impossible to predict. Many special students of the subject feel that prices will settle at somewhere near the 1916 level.

The idea that the general level of prices is regulated by the amount of money-and-credit in circulation, is known as *the quantity theory of prices*. It is further discussed in Chapter IV.

But whether a rise or a fall in the general price level be caused mainly by more or less interdependent changes in the demand for, relative to the supply of, *many* commodities, or mainly by changes in the supply of, relative to the demand for, money-and-credit—or by both, as seems to be the case—it is quite clear that generally falling prices discourage production and trade while they are falling, and that generally rising prices encourage production and trade while they are rising. Manufacturers naturally hesitate to produce many commodities, based upon current expenses of production, when they face the prospect of selling these commodities later on for less than the current market prices; and of course merchants hesitate to buy many commodities the retail prices of which may fall before they sell them. Nearly all consumers are disinclined to buy freely when prices are falling. Thus fall-

ing prices tend to cause "hard times," or a decrease in the volume of trade, involving a decrease in production. Rising prices have an opposite effect. They tend to encourage production and trade. Yet a rising price level is a disadvantage to creditors who get back in purchasing power less than they lend by as much as the value of a dollar falls between the time they lend and the time their loan comes due. But when prices are falling, debtors suffer, for they must pay back more, *in purchasing power*, than they borrowed. This result of changes in the purchasing power of the dollar is known as the problem of the changing "standard of deferred payments." It emphasizes the desirability of having a dollar of more stable value. Some of the proposals for accomplishing this are stated a little later on.

Although rising prices stimulate business, prices in general cannot continue to rise indefinitely. When they stop rising and begin to come down, business depression follows; and the depression tends to be severe in proportion to the rapidity of the fall in prices—and the lack of preparation for it on the part of business men.

Crises or panics are relatively sudden business depressions of varying breadth and depth, which have occurred at intervals of about ten to twenty years. They are marked by an abrupt decline of prices. The true causes of crises are not as yet fully understood. Excessive optimism during a period of rising prices—with feverish promotion of industry and trade, involving reckless investments and the placing of too much capital into enterprises from which returns would come only in the remote future—is probably the main cause of crises. It is excessive eagerness to take advantage of new opportunities or of steadily rising prices—while they are rising. Then, remembering past experiences, an intuitive feeling that prices cannot indefinitely continue to rise, gains strength as prices mount higher—up to the breaking point, precipitated perhaps by the failure of some big business concern, which is quickly

followed by a general attempt to avoid the inevitable losses of a sudden decline in prices.

Thus, although something may be said in favor of a steadily rising price level as a stimulant to business development, the ultimate consequences seem to be undesirable. Whether so to control the supply of money-and-credit, if possible, as to prevent both a general rise and a general decline in prices, is an open question. Some feel that the purchasing power of a dollar and of all monetary units used in other countries, could be and ought to be fixed once for all time and rigidly maintained. Many ingenious methods of thus stabilizing the value of the monetary unit have been proposed. Some suggest altering from time to time the amount of gold represented by one dollar. Others advocate government control of the production of gold. A few suggest doing away with gold as the basis of the value of all monetary units and substituting some abstract unit with its value or purchasing power carefully controlled by an international tribunal authorized to regulate its supply according to changing volumes of trade.

Better understanding of the true cause or causes of generally rising and falling prices will undoubtedly help in finding the best means of avoiding relatively wide and sudden changes in the general level of prices. It is hoped that the use of federal reserve notes and control of rediscount rates by the Federal Reserve Board, explained later in Chapter IV, will help control fluctuations of the general price level.

While business as a whole is affected by generally rising and falling prices as explained on preceding pages, business men are more directly interested in the current fluctuations of the prices of individual commodities as these prices are influenced by impending changes of the supply of and demand for them. Forecasting price changes of individual commodities is today a highly specialized art, especially with speculators on the stock and produce ex-

changes. These speculators may or may not render economic service, depending largely upon the accuracy of their judgment concerning future changes of supply and demand, also upon their integrity in keeping free from manipulation of prices by means of purchases or sales engineered solely in an attempt to change market prices irrespective of the *actual* prospective changes of supply and of demand as controlled by producers and by ultimate consumers. Honest and intelligent speculation, however, is beneficial. It tends to prevent wide and abrupt fluctuations of prices and permits manufacturers to purchase raw materials for future delivery with less risk of loss from a sudden fall in prices; and it tends to result in a more accurate adjustment of the market price to the actual conditions and the prospective conditions of supply and demand. In the case of some products, a larger future demand relative to supply, anticipated by speculators and made known through their willingness to pay a higher price for future delivery, tends to cause producers to expand production; while a smaller future demand relative to supply anticipated by speculators, tends both to discourage production and to encourage consumption.

Perhaps the greatest benefits of speculation come from its effect upon consumption. A small future supply of any commodity—wheat, for instance—anticipated by speculators who are therefore willing to pay a higher price for wheat, tends to cause *present* consumption of wheat to be lessened and thus conserves more of the supply for future use.

Speculation combined with our storage facilities, such as cold storage of eggs and grain elevators, permits more even consumption throughout the year, causing the respective prices of many commodities to be more nearly the same at different times. We pay more than we would otherwise pay for eggs, as an example, in the spring and summer, but less than we would *otherwise* have to pay for eggs in the winter.

Speculators are professional risk takers, freeing many other business men from much of the risk they would otherwise be compelled to carry. But professional speculation is limited to commodities the separate units of which are uniform in character and value, such as bushels of wheat or bales of cotton, or stocks and bonds; also to commodities produced in relatively large quantities. The stock and produce exchanges, where these commodities are bought and sold in large quantities, are the best examples of competitive markets—wherein all bids and offers may be instantly known to many traders, permitting frequent and fine adjustments to continuous changes in the ratio of supply and demand.

Arbitraging is another specialty. It is the business of almost simultaneously buying something in one market where the price is relatively low, and selling it in another market where the price is higher. *Arbitrageurs* operate mainly in the purchase and sale of foreign exchange, tending to cause the price of foreign exchange to be more nearly the same at any one time in different markets.

Such are the more fundamental causes and effects of price changes. All revert directly or indirectly back to the fundamental law of supply and demand—which operates to bring about the necessary adjustments of production on one hand and of consumption on the other.

CHAPTER III

Domestic and Foreign Trade

Four different appraisals of value are made in each purchase and sale. *B* contemplates the purchase of a watch from *A* for five dollars. *B* estimates both the relative value of five dollars and of the watch. *A* does the same. If *B* estimates greater utility to him from possessing the watch than from retaining possession of his five dollars, and if *A* estimates greater utility to him in possessing the five dollars, the transaction will be made. Both *B* and *A* will gain utility.

Thus trade results from the difference in the value of commodities as appraised by different individuals or by different groups of individuals. This difference in the appraised value of commodities and services arises from differences in their cost of production as between buyers and sellers and from differences in ability to find and develop utility, or want-satisfying power, in them.

Trade is man's method of co-operation in gaining the greatest total of wealth at the least cost. It permits increased specialization and division of labor; divisions among countries and sections of countries as well as among the workers in industrial plants. Trade is usually classified on the basis of the area covered by the transfer, into local, domestic or national, and foreign or international.

The domestic trade of nearly all countries is much greater in volume than their trade with other nations. The foreign trade of the United States, for instance, is roughly estimated at 8 per cent to 12 per cent of the total trade. National prosperity, therefore, wherein employment at fair wages is plentiful, depends greatly upon the volume of domestic trade, involving, as it does, a commensurate volume of production. But the relative importance of foreign and domestic trade, as factors in

promoting prosperity, varies a great deal under different conditions, as explained later on.

That "competition is the life of trade" is quite generally believed to be the case. Legal regulation of trade in this country, has been designed primarily to prevent practices in restraint of competition—to keep industries open to potential competition. The chief aim of the Sherman Anti-Trust Law (1890) and of the Clayton Act (1914) is to keep competition free and open and fair. The Sherman Law strikes at combinations in restraint of interstate commerce; while the Clayton Act is directed largely toward the prohibition of trade practices which are regarded as "unfair" competition, and it created the Federal Trade Commission as an agency for accomplishing this purpose. One of the specific aims of the Clayton Act, for example, is to do away with interlocking directorates: to prohibit a capitalist from being a director in two or more large companies, wherein he would have the opportunity to cause one company to favor, unfairly, another company.

Recently, certain kinds of associations and agreements among competitors, although some of them seem to be contrary to interpretations of the Sherman Act, are beginning to be looked upon with favor. Many associations designed to foster cooperative efforts in meeting competition now exist. Cooperative advertising is conspicuous, wherein the companies of one industry combine in campaigns of publicity for helping along the sales of the products of the industry as a whole; and several associations encourage the use of uniformly accurate cost accounting methods among competing companies in their respective industries—to prevent loss from estimates that are wrongly figured. The willingness of competitors within a single industry to share with each other their knowledge of improved methods is characteristic of an increasing number of business concerns; because many leading business men feel that improvement in their industry as

a whole will make business better for their individual companies. Many of these cooperative efforts among competitors in many industries are designed solely to give better service at lower cost to consumers—with increased profits to producers. Such cooperation within single industries tends both to place competition within the industry upon a more solid basis of service to customers and to intensify the competition between competing industries—as in the case of the brick industry *versus* the lumber or the cement industry. Modification of the interpretations of our anti-trust laws to permit certain kinds of cooperation among competitors is an important current problem. Its solution requires a true conception of monopoly as related to prices and to government ownership and government regulation.

As suggestion in Chapter II, monopolistic power checks the operation of the competitive law of prices in the case of many commodities and services. But it is often difficult to determine the extent of monopolistic control of price in any industry. The size of a business concern is not, in itself, evidence of monopoly, although many concerns have grown large by grace of monopolistic control of prices. But when two or more big concerns freely compete, bigness may be very desirable. Large development of a business often, if not usually, indicates exceptional ability in rendering adequate service at a low price. However, when one concern grows to be much larger than any of its competitors, it tends to develop monopolistic control of supply.

Regardless of size, it seems to be good public policy to guard against arbitrary private control of prices, especially when the welfare of large numbers of people depends upon a relatively low price. And public welfare is also advanced when cost-reducing cooperation is permitted to all competitors alike.

Some industries *ought* to be monopolies if they can thereby reduce the cost of production and put themselves

into position to render better service at a lower price. Street railways, electric light companies, and many other public utilities, in their respective localities, serve best as monopolies. They are sometimes called *natural* or *expedient* monopolies—industries wherein competition increases the cost of service to consumers or wherein it may become self-destructive to the industry, as was the case in the railway rate wars in times past. Public regulation of rates in such cases has proved a good thing for all concerned.

Public control in general is applied to prices, to competitive methods, to the employment of labor, and sometimes to the quality of service rendered. Price control in the form of rate making and control of competitive methods is commonly exercised. Labor legislation is rapidly growing. Quality of service, however, is seldom regulated; but its importance is beginning to be recognized. The general tendency is toward increasing public control. This seems advisable in proportion to the potential ability and especially in proportion to the observed inclination of an industry, large or small, to take advantage of monopolistic power to earn more than a "fair return" on investment. A fair return is generally construed to be the normal profit that is earned by similar kinds of business which operate under competitive conditions. In the case of many public utilities, the tendency of courts and commissions is to fix a price which yields the "normal" profits on the actual investment of capital; and this profit is fixed close to the average return on invested capital as revealed by general interest rates.

There is a vast difference between government regulation and government ownership. Much may be said in favor of private ownership and its control of management, *with its profit-and-loss incentive*, as compared with public ownership which lacks, relatively, this important stimulant to the production of satisfactory products or services at low cost. But a universal need for adequate service

may, in some cases, off-set the disadvantage of a higher price, should the price be higher as a result of a public ownership. Or it may be desirable for the nation as a whole to accept, as a result of government ownership, a "loss" by fixing a price that does not cover the cost of production—entailing increased taxation. This was the case for many years in our postal service. But the less general the amount of service consumed by different individuals or groups of individuals, the less justifiable would be government ownership *which operates at a loss*.

In nearly all cases wherein privately owned industries are found to be operated without sufficient regard for the public welfare, government *regulation* may be exercised to gain the desired reforms—without the risks of government ownership. And the risks of actual management by government officials are obvious enough, particularly so in a democratic country. Especially do risks arise when an industry stands between two opposing interests represented by masses of people on each side, such as happens to be the case in the meat packing industry.

The vast difference between public *ownership* and public *regulation* is important. But the ever present possibility of public ownership, as well as public regulation, exercises a salutary influence upon industries that have the opportunity to prey upon the public as a result of monopolistic control of supply or of demand.

Apart from legal requirements, however, a genuine desire to foster public interests is now growing within many industries. This spirit arises from better appreciation of the responsibilities of industrial management to labor and to the general public as well as to the owners of industries. That this progressive spirit will continue to spread seems probable because its basis is a sound estimate of the value of good-will which gains the cooperation of the general public and of labor. This is a factor of vital importance in promoting *profitable* industrial operations.

Such are the fundamental problems of domestic trade. Foreign trade is not essentially different from domestic trade. It arises from the same cause: mutual profit to traders. Frenchmen trade with Americans, for instance, for the same reason that one American trades with another. The people of different countries tend to specialize the same as people in different parts of the same country.

Division of industry among different countries tends toward specialization in commodities the production of which is encouraged by natural advantages, primarily the advantage of owning raw materials, produced at home, at relatively low cost. Climate and soil conditions, the nature of labor supply, the accumulated strength of industry, and even the temperament of the population are essential differences. We look to France, for example, for certain fashionable commodities in the production of which excellent artistic taste is required; while the United States excels in the production of many mechanical commodities, such as farm machinery—the result of inventive genius coupled with unusual managerial ability in our factories. But *essentially* all of the foregoing differences are the same as those which underlie divisions of production within countries.

The *law of comparative real costs* applies in the trade among different sections of one country as well as among different countries. This law lies at the basis of all trade and all specialization, particularly regional specialization. Adam Smith illustrates the law thus: "The natural advantages which one country has over another in producing particular commodities are sometimes so great that it is acknowledged by all the world to be vain to struggle with them. By means of glasses, hot beds, and hot walls, very good grapes can be raised in Scotland, and very good wine too can be made of them at about thirty times the expense for which at least equally good wine can be brought from foreign countries." The advantages of foreign trade,

which are very obvious in this case, are equally true in less obvious cases.

Tariffs and many other restrictions tend to interfere with ideal specialization among nations. Principally on account of its influence on domestic trade and its convenience as a means of federal taxation, foreign trade has been rigorously subjected to government regulation in many countries.

"Free trade" is a big problem in nearly all countries. The theoretical argument for free trade is based upon the premise which states that the greatest good results when all nations work together like departments in a factory—each nation so specializing and coordinating its production with that of other nations as to gain the greatest net production of world-wealth. Protectionists believe, however, that a new country may remain undeveloped for a long time unless protection is afforded in the first stages of development, even though a high price for the time being has to be paid for the protection. They advocate protection for industries which are expected, sooner or later, to be able to stand on their own feet against foreign competition—after which time protection may be removed. This is often called the "infant industry" argument. The future possibility of low-cost production in the industry, the domestic need for the product, the dependability and cost of importing the product, and especially the law of comparative costs are some of the considerations in determining which industries should thus be protected.

Self-sufficiency in event of war has also been a motive for the protection of many industries, especially of "key" industries, such as the making of dyes and chemicals, which support other industries.

On account of the extreme intricacy of the tariff problem and the lack of sufficiently complete and accurate information concerning the effect of tariffs on the industries involved—and the tariff affects nearly all industries

either directly or indirectly—it seems impossible to arrive at a solution of the tariff problem which does not to some extent favor some interests more than others. But the ideal aim of tariff revision is to magnify the *total* gains and to minimize the *total* losses, and to approach as nearly as possible fairness to all interests. The ever-present possibility of unfairness through lack of adequate information, if not through less excusable causes, makes non-partisan and intelligent tariff revision exceedingly important.

Tariffs which give so-called incidental protection are often imposed primarily for the sake of revenue. Tariffs are also sometimes designed as retaliation against a country that protects itself against importations of goods which the retaliating country desires to send to it, or because the other country allows its producers a bounty on production and thus gives them an artificially low cost of production—which is considered to be unfair international competition. Many commercial treaties have been signed in order to avoid retaliatory tariffs. Tariffs are also employed to prevent foreign producers from “dumping” goods at a price below their cost of production in order to demoralize the market for the home producers and drive them out of business, and thus possibly establish a monopolistic market for the foreign product—and then raise the price.

The leading questions are: What industries, if any, shall be protected; and shall protection be extended or curtailed, and where and how far?

Historically, many countries have gone through stages of development somewhat as follows:

1. The stage when production is confined largely to the extractive industries, such as farming, forestry, trapping, and mining. This is the period, in newly settled countries, when free trade seems more desirable. The country is dependent upon other countries for manufactured products

and upon foreign markets for the sale of its surplus returns from nature.

2. The stage when a country is striving to develop manufacturing industries to take care of domestic demand—to become less dependent upon other countries for improving the general standard of living, in so far as it is improved by the use of more manufactured products; also for self-sufficiency and all the other benefits of diversified industry. This is the period when protection of home industries seems to be desirable.

3. The stage when the major manufacturing industries have developed capacity to produce quantities beyond the needs of the home market—when foreign markets are needed for continued development. This is the period when protection of many industries seems unnecessary. The United States is now emerging into this stage. England reached it some time ago.

Our government is now greatly encouraging the development of foreign trade. The Webb-Pomerene Bill permits cooperation among exporters without fear of violating the anti-trust laws. A Foreign Federal Reserve Bank is being considered. Several large banks are rapidly extending their foreign branches. The United States is developing a merchant marine and is now a heavy creditor to many foreign countries, and is in excellent position to place loans where they will stimulate our export trade—for trade follows loans even more than it follows the flag.

There is some danger, however, of excessive emphasis upon the development of exports and a corresponding neglect of imports. That we must buy if we would sell is an important truism which is sometimes overlooked. The war has emphasized this. Other countries, for instance, were largely prevented from trade with South America. We had visions of gigantic trade there, but it was soon found that South American countries could not buy much from us, because other countries, including ourselves, were

not buying much from them. That we must buy goods or loan funds if we would sell is evident. All trade is essentially barter, or the exchange of goods for goods. The use of money and credit tends to hide this fact.

The functions of money and of credit in connection with domestic and foreign trade are explained in the next chapter; also the question of a "favorable" balance of trade, the general desire for which would seem to be in the nature of a popular fallacy—for there is an important difference between the possession of money and the possession of economic goods.

CHAPTER IV

Domestic and Foreign Exchange

Exchange is the mechanism of trade. It includes money and credit, and banking.

Money is the medium of exchange which passes generally current from hand to hand. Many things, at times, have been used as money: skins, ivory, beads, tobacco, and the like. But long ago the precious metals, gold and silver, were found to have most of the qualities desired in money.

Gold is now the metal used to fix the value of the standard monetary unit in nearly all countries. An American dollar represents a metallic value of 23.22 grains of fine gold (total weight, 25.8 grains .9 fine). All money in this country, other than gold coins, derives its value from the fact that our government will, on demand, exchange gold coin for it at its par or face value.

Our stock of money consists of gold pieces, silver dollars, subsidiary silver, nickel and copper coins, silver certificates, treasury notes, gold certificates, United States notes, national bank notes, federal reserve bank notes, and federal reserve notes.

Federal reserve notes are issued by federal reserve banks and are secured by rediscounted commercial paper, gold reserves, and the general credit of the government. Federal reserve *bank* notes are issued against government bonds. They are virtually the same as national bank notes. The ultimate aim is gradually to retire both national bank notes and federal reserve bank notes and to let federal reserve notes take their place, because the federal reserve notes are issued to take care of the current commercial transactions, and are more *elastic*. They tend to expand in amount with expanding trade, because they are issued against deposits of commercial paper; they are required by law to flow back to the federal

reserve banks when the securities against which they are issued, are paid; and thus the amount of them in circulation tends to vary with the demand for them to take care of domestic commercial transactions. It is hoped that their use will help in avoiding periodic currency inflations,

Gold certificates are issued by the government against a reserve of gold equal in value to the par value of the certificates. Silver certificates were issued against corresponding reserves of silver, while the treasury note of 1890 were backed by "coin," which the government interpreted as meaning gold. Both silver certificates and treasury notes are "hold overs" from the time when our government under the Bland-Allison Act of 1878, and the Sherman Act of 1890, purchased limited amounts of silver in an attempt to maintain the ratio of silver to gold at 16 to 1.

If paper money is made legal tender; that is, if the law requires its acceptance in payment of debt, and yet it is not redeemable in gold on demand, it is known as *fiat* or forced money. Doubt may arise as to the probability of redemption and its value tends to depreciate accordingly. The *greenbacks*, officially known as United States notes, issued during the Civil War, were *fiat* money. When the government finally offered to redeem them at par value in 1879, having accumulated a stock of gold for the purpose, they regained their full face value—and nearly all of them remained in circulation. 1879, therefore, is the date of what is known as "the resumption of specie payments." The willingness of the government to redeem all paper money in gold maintains it in circulation at par value.

If a country uses two metals as standard money, this practice is known as bimetallism. A fundamental argument against bimetallism is found in *Gresham's* law, which states that when two kinds of money circulate side by side in a country and one kind is less valuable than the other, yet both are legal tender, the less valu-

able money will be used in paying debts and the more valuable money will tend to be held out of circulation. This fact was observed by Sir Thomas Gresham in England during the reign of Queen Elizabeth, when new coins were put into circulation in the hope that they would replace clipped and debased coins. But the new and heavier coins soon disappeared, because their metallic value was greater than the metallic value of the older and lighter coins. The metallic value of subsidiary silver, nickles and coppers, being less than their face value, is a factor which helps keep them in circulation.

When two different metals, such as gold and silver, are used as standard money, a fixed "mint ratio," such as 16 to 1, is established; that is, silver coins are minted to weigh sixteen times as much as corresponding gold coins. But the market value of each metal, in the form of bullion, depends largely upon the available supply of each metal, the cost of its production, and the demand for its use in industry. These causes of value cannot be arbitrarily controlled. The market value of gold bullion, for instance, may become thirty times as great as that of silver bullion. Yet the legal mint ratio would make coined gold worth but sixteen times as much as coined silver for use in making exchanges. Therefore, gold coins would be melted down and sold as bullion, or used in payments of balances due to foreign countries, or they would be hoarded. Silver bullion alone would be taken to the mint to be coined. Thus Gresham's Law operates against the success of bimetallism.

Money is one of two kinds of exchange media. Credit instruments are the other kind. Broadly speaking, credit is purchasing power which arises principally out of the possession of the valuable things owned by individuals, partnerships, or corporations, such as houses, land, factory buildings, machinery, raw materials, and so on. This is called "personal credit." It may be changed into more

widely acceptable purchasing power in the form of money or of credit instruments—usually into “bank credit” or “deposits” against which checks are drawn.

Credit instruments are written indications of willingness and ability to pay money. They may be roughly classified according to their range of acceptability. Money that is based upon the government's credit would come first—if one chooses to look upon it as a form of credit instrument. All lawful money, except gold and gold certificates, is sometimes called “credit money,” because the government's *credit* maintains it in circulation at par value. There is not nearly enough gold in the country to redeem all paper money at one time. Gold reserves, however, are usually adequate for taking care of normal demands.

Following “credit money” in range of acceptability are, perhaps, bank drafts and bank cashier's checks, bank acceptances and discounted bills of exchange (which have a bank's credit behind them, as well as the credit of both seller and buyer, as guaranty of payment) accepted drafts (drawn by sellers on buyers and accepted for payment in writing by the buyer, commonly known as *acceptances*) and checks.

The foregoing list includes nearly all of those credit instruments which may be considered to be in circulation. Circulating credit instruments are distinguished from mortgages, bonds, and debentures which are not commonly used as media of exchange.

Perhaps the volume of purchases paid for by the use of checks is greater than the volume paid for by the use of all other credit instruments; and many checks are “cleared” without the use of money, in “clearing houses” maintained by banks in nearly all important cities. All checks received by each bank drawn on other banks are sent to the clearing house where the sum total of dollars drawn on each bank is balanced against the sum total of dollars represented by the checks each

bank turns in on other banks. The differences are settled between the clearing house and the respective banks—thus saving each bank the trouble of dealing directly with the other members of the clearing house association. The point is that a huge volume of exchanges is made without the direct use of money. Furthermore, when the time comes for a credit instrument to be paid, another credit instrument may be used in making the payment.

Possibly there is some formula which governs the amount of credit instruments which may be issued with gold as the direct or indirect basis of security, but such a formula is apparently not now determinable. Many credit instruments derive their purchasing power from commodities or services other than gold. It may actually exist in the form of fixed or circulating capital, or merely in the form of the future earning power of a business or of an individual—services yet to be rendered. The gold dollar is merely the unit of value by which the values of other things are measured.

But the extension of credit is based upon confidence in the debtor's willingness and ability to pay *money* when the time comes for payment. If money happens to be tight, confidence is somewhat shaken and the amount of credit-in-use accordingly tends to contract; and if money is easy, the amount of credit-in-use tends to expand.

In the event of a relatively sudden increase in the volume of business transactions, such as that caused by the war, a greater amount of money may be drawn into circulation and the rapidity of its circulation may be increased, and at the same time credit may be greatly expanded. But the expansion of credit tends to leap ahead of the expanding stock of money. Credit also tends to contract faster than the stock of money when the volume of exchanges suddenly decreases. Thus expansion and contraction *of credit alone* becomes a

prime cause of changes in the purchasing power of a dollar—in so far as the purchasing power of a dollar is affected by changes in the total amount of, relative to the demand for, exchange media in circulation.

Because the amount of credit-in-use which arises out of an additional stock of money may not be accurately established, and as the amount of money and credit-in-use does not bear a constant ratio to the gold reserves, any statement that prices rise in direct proportion to an increase in gold production or even in proportion to changes in the money stock, must be greatly qualified.

If, however, a method of controlling the *total* amount of exchange media in circulation, including *both* money and credit-in-use, could be devised so that the amount would automatically change proportionally with changes in the volume of exchanges, it seems that then the general purchasing power of a dollar would be held more stable.

As suggested in Chapter II, economists are not in full agreement concerning the causes of general price changes, or changes in the purchasing power of the dollar. They agree, however, that deflation of credit-in-use and of money in circulation by means of building up a greater proportionate gold reserve, or by contraction of the amount of credit-in-use—by raising discount rates, for instance—will tend to lower prices in general.

The “purchasing power of a dollar” and “the price of the use of money,” are, of course, quite different things. The use of money may be purchased at a price—known as *interest* when the price is paid at fixed times *after* the purchase, and as *discount* when the price is paid at the time of purchase.

The price for the use of money varies (1) with the supply of and the demand for the use of money and (2) with the degree of risk involved in the loan. Rediscount rates, for instance, are lower than original discount rates,

because, for one reason, some of the risk has already been taken care of in the original discount payment.

The market price of the use of money rises and falls the same as the market price of other commodities, and with essentially the same modifications and for the same fundamental reasons—in response to the law of supply and demand, modified by monopolistic influences. The money market, like the market for other commodities, is the area wherein the use of money may be purchased at one price throughout the area, modified by the degree of risk involved and varying somewhat in some cases according to the bargaining skill of buyers and sellers, as in the case of many other commodities.

New York is the central or largest market for money in this country, as it is for many other commodities, especially commodities which are exported or imported, New York being our most important port. Nearly all accounts of importers and exporters are settled or cleared in New York, also many large domestic accounts. New York is also the country's central market for large issues of investment securities. Many banks all over the country, therefore, have accounts with New York banks in order, for one reason, to facilitate payments in New York from all parts of the country, and because many New York banks always have a market for the use of "call" money to finance purchases of stocks and bonds for investment brokers.

But because relatively large quantities of money are held in New York, any upheaval of conditions there is felt throughout the entire country. It was, in part, to avoid excessive concentration of the money supply in one place that Federal Reserve Banks were established in eleven other cities in different regions of the country, each serving all "member banks" in its region as the place of deposit for their legal reserves.

This Federal Reserve Banking System was established primarily to increase (1) the mobility of reserves, with-

out establishing one large bank, and (2) the elasticity of currency. The Federal Reserve Board, consisting of seven members, including the Secretary of the Treasury and the Comptroller of Currency, sitting in Washington, has general supervisory power over the twelve regional banks in such matters as reserves and discounts rates.

The regional banks may enter the open market and compete in the purchase and sale of many forms of credit instruments and thus become a factor in controlling the amount of money and credit in circulation by manipulating general discount rates. Thus the Federal Reserve System may cause a more even rate of discount throughout the country, and it may help to prevent panics by restricting excessive borrowing on one hand and by lending more freely when advisable on the other hand.

The Federal Land Bank Act of 1916 provided for the establishment of twelve federal land banks in selected parts of the country, under the supervision of a Federal Farm Loan Board. The banks and their branches make long-time loans at 6% interest to associations of borrowers who desire money for agricultural purposes. This Act also provides for joint stock land banks in much the same way. Federal land banks are now being established rapidly, especially in the West, where the rate of interest on farm loans tends to exceed 6%.

A rigid classification of banks seems impossible. Private banks and state and national banks, whether they be savings banks, trust companies or commercial banks, including investment banks, nearly all now offer many forms of banking service. Perhaps the main line of demarcation, however, is between commercial banks, which deal primarily in short-term loans, and industrial or investment banks, which deal mainly in relatively long-term loans.

The responsibility of banks, as distributors of capital funds, is linked closely with the welfare of nearly every

business enterprise; for business is now largely conducted "on credit" borrowed from banks. Transfers are made by debiting and crediting accounts—accounts between different banks and accounts of depositors in individual banks. Little actual cash changes hands; and relatively little money is shipped back and forth between cities. This is why the modern world can do an immense volume of business by means of relatively a small amount of money and of gold. Our modern credit system is the great contribution of banks to business enterprise. They are specialists in supplying business men with exchange media as needed.

A bank is in position to extend an amount of credit in excess of the amount of gold and other money in its vaults. But it is "out of business" as soon as it fails to meet its demand obligations. To guard against this contingency a bank must always keep in reserve some gold, or other lawful money. The amount of lawful money a bank must always have available is to be determined in each case by experience. It must have enough to meet the daily calls for money to be paid out, allowance being made for what comes in every day. Its customers seldom want money; they almost always want "credit," represented by the right to draw checks. Usually the law requires a bank to keep reserves of lawful money equal to from five to thirty-five per cent of its demand liabilities, but this is merely attempting to enforce by law what is the first rule of good banking practice without it. The limit set by this consideration, of course, is very elastic, so that banks are almost always in a position to underwrite the personal credit of any one who really has any to underwrite, though they may not always be in a position to accommodate him at as low a rate of interest as he would like.

A federal reserve bank, however, is required to maintain reserves in gold or lawful money of at least thirty-five per cent of its deposits. Member banks in a central

reserve city—New York, Chicago, or St. Louis—have to maintain reserves amounting to at least thirteen per cent of its demand deposits and three per cent of its time deposits; in other reserve cities, ten per cent of its demand deposits and three per cent of time deposits; and outside of reserve cities, seven per cent of demand deposits and three per cent of time deposits.

Small reserves, many assets which can be quickly converted into cash, and constant watchfulness put banks in a position to extend credit accommodation to those who are of good repute and of good prospects.

The main constituent of the bank reserves, in every country, is and ought mainly to be gold, although this gold need not be kept in every case in the vaults of the bank which owns it. The modern world has taken its stand firmly upon the gold standard, buttressing its other money and its various credit instruments by intricate provisions to make it possible for their holders always to get gold and to get it promptly. It has also invented and developed various ingenious methods of carrying on business "on credit," through the offsetting of claims, thus effecting great economy in the use of money and imposing upon bankers a great responsibility for the financial affairs of the entire business world.

Such are the main aspects of domestic exchange. As between domestic and foreign *trade* so between domestic and foreign *exchange*—exchange here meaning the mechanism of trade—there are no essential differences. Foreign exchange is also, very largely, the balancing of debits against credits, although it is somewhat more complicated by reason of the fact that the standard monetary units in different countries represent different quantities of gold.

Foreign exchange, in the technical sense, is the purchase and sale of orders for the payment of foreign money at a foreign point. Foreign accounts in nearly all countries are settled on the basis of gold alone. This would neces-

sitate the transfer of great quantities of gold were it not for the mechanism of foreign exchange by which settlements are made without transferring very much gold. Highly simplified, this is the principle: If *A*, located in London, owes \$1,000 to *B*, located in the United States, and if *C*, in the United States, owes *D*, in London \$1,000, then *C* may pay \$1,000 to *B*, both of them in the United States, and *A* may pay \$1,000 to *D*, both in London. Thus *A* and *C* pay their debts and *B* and *D* collect what is due them without transferring gold.

This principle is operated by means of the purchase and sale of bills of exchange. The typical bill of exchange is an order drawn by a seller on a buyer, directing the buyer to pay a sum of money to some third party. These bills are of many different kinds; they run for different lengths of time, through many banking channels, and are actually settled in many different ways. Exporters sell them to banks, who use them to build up in London, or elsewhere, funds against which they draw their own bills to sell to American importers.

The *rate* of foreign exchange is the price, in the money of one country, of one unit of the money of another country payable in that other country. For example, an American importer buys, with American dollars, British pounds payable in London. The amount of gold in a pound sterling is the value of the amount of gold in 4.8665 dollars. Therefore, \$4.8665 is the *par* value of a pound sterling. The importer pays more or less than par for pounds payable in London according to current rate of exchange. This rate, under normal conditions, tends to fluctuate with changes in the supply of and the demand for bills of exchange payable in London. But rates of foreign exchange, under normal conditions, will not fluctuate widely. It costs normally about two cents a pound sterling to ship gold from New York to London. Therefore, if the price of London exchange goes above, say, 4.886, the American importer would find it cheaper to pay his bill

by shipping gold; and if London exchange goes below, say, 4.846, the American exporter would find it cheaper to collect his bill by having gold shipped from London. Thus 4.846 is sometimes called the "gold import point," the point below which gold will tend to flow into New York, while 4.886 is the "gold export point," the point above which gold will be sent from New York to London. As a matter of fact, the exporters and importers themselves seldom ship gold; the banks do this.

The rate of exchange on other countries is established in the same way and varies for the same fundamental reasons. The rate of exchange on Paris, however, is quoted in francs instead of in dollars. $5.18\frac{1}{4}$, for example, means that five francs and $36\frac{1}{2}$ centimes, payable in Paris, can be purchased here for one American dollar.

Theoretically, changes in the rate of exchange are supposed to help bring about equilibrium of exports and imports. As already suggested, the supply of bills comes mainly from exporters; the demand for them, mainly from importers. Therefore, an increase of imports over exports tends to cause the demand for funds payable abroad to increase relative to the supply which arises mainly from exports—causing a higher rate of exchange. A higher rate of exchange causes importers to pay more for their merchandise and so *tends* to discourage imports. A high rate also tends to increase exports, and hence to increase the supply of bills offered for sale. A low rate of exchange results, normally, from an excess of exports over imports—increasing the supply of funds payable abroad relative to demand. But a low rate causes exporters to get less for their merchandise and so *tends* to discourage them from exporting; and, at the same time, it tends to encourage importing. Thus it may be said that fluctuations in the rate of exchange tend to help keep the amount of exports and imports in equilibrium; that excesses of exports and imports tend to be automatically reversed by

the changes in the rate of exchange which they themselves cause.

Pronounced differences in the general price levels of two or more countries also tend to be automatically eliminated. If commodity prices are relatively low in the United States as compared to prices in England, for example, our exports to England, other things equal, tend to increase relative to imports. This increases the supply of exchange payable in London, which tends to lower the rate of London exchange. If the rate goes below 4.8465, gold will begin to be shipped from London, as explained above. More gold here tends to decrease its purchasing power, causing higher prices, which tend to encourage imports and to discourage exports. And so, again, movements of gold, as affected by changing rates of foreign exchange, tend to help keep imports and exports in balance, causing prices in various countries to seek about the same level. Such is the tendency under normal conditions. During the war interested countries placed restrictions upon the export of gold, so that variations in rates of exchange were deprived of the usual corrective. They may not become "normal" for a long time.

The credits of one nation tend to be balanced by its debits against other nations. A "favorable balance of trade" is largely mythological—when both "visible" and "invisible" exports and imports are considered. Visible exports and imports are those which are commonly included in government reports, including, in nearly all countries, exports and imports of gold as well as merchandise. Invisible exports and imports are those which are not commonly included in government reports, such as tourists' expenses, oceanic transportation charges, investments in foreign securities, money sent home by immigrants, and so on. The total of both visible and invisible exports will, in the long run, equal the total of both visible and invisible imports.

In this respect—and in nearly all other respects, except

in the intricacy of its mechanism and in the amount of governmental restrictions involved—foreign trade is not different from domestic trade. The debits of any town, or of any one part of the country, in its “foreign” trade with other parts of the country, are balanced by its credits. Again, it must be remembered that all trade is essentially *barter*, or the exchanging of goods for goods, although this result is brought about indirectly by the use of money and credit instruments.

Money, as such, and credit instruments are not *themselves* real wealth. They cannot be eaten, or worn, or directly consumed in any way. Money and credit are merely the *mechanism* of modern trade by which commodities and services from one locality or country are exchanged for commodities and services from another locality or country. Domestic and foreign exchange permits the very high degree of specialization in production treated in the next chapter.

CHAPTER V

The Production of Wealth

Production is the process of adding utility, or want-satisfying power, to nature. Labor and nature are the main factors in production, aided in nearly all cases by capital goods. In economics, *nature*, also called "land," includes air, water, minerals, rock, wind, soil, forests and uncultivated vegetation of all kinds; in short, substantially all things that are supplied *gratuitously* by Providence. Labor is any human exertion, mental or physical, which adds want-satisfying properties to nature. Instruments formed by nature and labor for use in producing more wealth, such as buildings, machines, and tools, are *capital goods*, the third basic factor in production.

Capital goods are commonly classified on the basis of the length of time they serve as a productive factor without replacement, into *fixed* and *circulating* capital. Fixed capital goods survive many acts of production before complete replacement, as in the case of nearly all tools and machines; while circulating capital goods survive but *one* act, or at least very few acts, of production, as in the case of coal. Capital goods are also sometimes classified on the basis of the freedom with which they may be used for various purposes, into *free* and *specialized* capital. Free capital goods may be used for relatively many purposes, as in the case of many factory buildings of standard construction; while specialized capital goods may be used for only one purpose, or at least for relatively few purposes, as in the case of machinery built especially for one unique operation.

Production may be analyzed with reference to the kind of utility added. The form of a commodity may be changed, such as molding iron into castings. This is adding *form* utility. The place of a commodity may be changed, such as transporting grain from Kansas to New

York. This is *place* utility. A commodity may be stored until wanted, as in a retail store. This is adding *time* utility. The want-satisfying power in nature's products, such as coal, iron and jewels, as it exists before the application of labor or capital, is sometimes called *elementary* utility.

Transportation and mercantile enterprise, as well as manufacturing, produce wealth. They add place and time utilities to commodities, without which the addition of form utilities, under the present industrial and commercial system, would be all but useless. Teaching school and practicing law or medicine are also productive; they produce services. Selling and accounting are productive occupations. Selling aims primarily to facilitate the process of adding *place* and *time* utilities. Keeping accounts and other records helps in adding all forms of utility to nearly all kinds of commodities. Our modern exchange system, including money and credit and banking, also facilitates the addition of want-satisfying power to commodities. Nearly all business activities, in fact, are productive, for most of them afford utility to somebody in some form. True, some occupations and professions are more directly productive of form, time, or place utilities, than others, and some have greater weight than others in adding these utilities; but their weight, as a factor in gaining a large output at a small cost, may vary inversely with their directness.

To create utilities to be used up in consumption is the ultimate result of production. We produce to consume. Consumption is an end in itself; production is the means to that end. This conception of the relation of production to consumption is the basis of modern standards which control the kind, quality, and quantity of commodities produced.

Perhaps the most important features of modern production are (1) the use of capital and (2) the division of labor. Capitalistic or "indirect" production involves the

THE PRODUCTION OF WEALTH

use of capital goods already produced; it differs from "direct" production in that it employs tools and machines, while the other produces goods directly by hand.

The production and the utilization of capital goods requires saving, waiting and investing, which require the foregoing of present consumption—for the sake of greater future consumption. Experience shows that as a general rule the more indirect the method of production is, the greater is the output in proportion to the amount of productive energy expended. A big factor in accomplishing this result is increased opportunity for division of labor.

Division of labor, broadly defined, includes *localization*, or concentration of individual industries within certain countries, and within certain parts of countries or towns, as well as the continuous use of workmen or of groups of workmen on relatively few operations. The latter is sometimes called functional division of labor or functional specialization. It reduces the number of tasks performed by individual workmen. This facilitates the selection of the best fitted workers for specific tasks—with less waste of superior skill and ability on relatively easy jobs. It also permits both greater and more constant use of tools and machinery, and it avoids the expense of long apprenticeships. In fact, highly specialized capitalistic production is a prime cause of increases in national wealth which permit improvements in standards of living.

Progress in production from early times may be roughly divided into several periods as follows:

1. *The Early Period*—when one man, with his own labor and land and with capital or implements fashioned largely by his own labor, produced mainly for his own consumption and for that of his immediate family; wherein virtually no division of labor was employed.

2. *The Craft Period*—when division of labor began to play an important part in production. Distinct separation of the ownership and control of capital goods and labor

and land arose. Labor began to work for wages. Land was beginning to be rented, and capital to be borrowed. Specialized crafts, arising out of *occupational* division of labor, came into existence.

3. *The Machinery Period*—when inventions of labor-saving machinery and methods began to develop rapidly. Functional as well as occupational division of labor arose. This is the period of the "Industrial Revolution," which began in England, about the middle of the eighteenth century, with the discovery of steam power, and gained tremendous impetus in the United States with important inventions early in the nineteenth century, notably the application of steam to navigation in 1807, and to railways about 1830. This period shows steadily increasing separation of the ownership of land, labor, and capital. Its chief features continue to characterize the present period.

4. *The Modern Period*—marked by extended development of machine production, extensive development of domestic and foreign trade, and by rapid development of large-scale production with its intensive functional division of labor. This is sometimes called the capitalistic period. In it the corporate form of organization was introduced, permitting a wider and more complete separation of the ownership from the direct control of industries. Combinations and consolidations of industrial enterprises also developed, resulting in concentrated financial control of many separate industrial plants. Operating a business on bank credit is perhaps the chief characteristic of the period.

The present-day period could perhaps be called the *scientific* era of production—the beginning of the use of *consciously* scientific methods, as explained later on.

The fundamental problem in production is the creation of the greatest amount of wealth at the least cost. *Money* cost, or expenses of production, are distinguished from *real* cost. We naturally figure costs in terms of money. But cost may be estimated in terms of wealth used up, of

labor expended, of hardships endured, of health jeopardized and destroyed, and so on.

It is hard to define real costs exactly, and it is even harder to determine how far they are truly representative of money costs. Excessive reductions in money cost often entail increased hardships to labor. Whenever a reduction in money costs does involve an increase in real costs, labor and society as a whole lose, although the owners of the business may gain. Labor legislation in general is designed to cut down *real costs*.

A constantly increasing number of progressive business enterprises voluntarily use more of the means of reducing real costs than are required by law, as by introducing exceptionally good working conditions and many kinds of welfare work. Such measures, by increasing the efficiency of workers, often decrease money costs as well as real costs.

Forward looking administrators are now more than ever inclined to find out what labor wants and needs to make it more efficient and more contented. Increasing mutual recognition of what is wanted by both labor and capital—each more accurately knowing what the other wants—will tend to increase the willingness and ability of each to cooperate with the other; and, at the same time, the opposing interests of capital and labor will tend to be promoted more intelligently on both sides of the conflict. This is an exceedingly important requirement in reducing the costs of production.

One leading manufacturer now analyzes the wants of his labor, in the order of importance to labor, as follows: (1) a fair money wage, (2) good working conditions, (3) a share in the management, (4) a share in the profits, and (5) welfare advantages, such as clubs, restaurant service, and workmen's cooperative associations, such as cooperative stores, building and loan associations, and so on. This manufacturer adds that a sincere "square deal" policy must be the motive of all the foregoing points,

and that cooperative aids to workmen do best when actually controlled and operated by the workmen themselves.

Modern large-scale production, or the production of relatively large quantities of a commodity in a single industrial plant or in several plants under a single management, is largely the result of the inventions of mechanical power-driven machinery. It is also the result of increased market areas which are made possible by means of improved facilities of transportation and communication.

The efficiency and number of competing units within an industry, the potential demand for the products or services of the industry, the *law of diminishing returns*, explained later on, legal restrictions on monopoly, and managerial ability are the main factors which determine the maximum size that may be attained by a single unit in any industry. All of these factors may and do tend to vary from time to time, and it is always difficult to predict the maximum development of the scale of production in a given industrial unit.

Competition as a limiting factor is *fundamentally* a problem of comparative cost per unit of product delivered to the ultimate consumer, including all costs of distributing and selling. Variations in cost result mainly from variations in costs of raw materials and supplies, labor, capital invested, administration, and selling costs. Large-scale production may, up to a certain point, be so employed as to reduce all these items of cost.

Perhaps the greatest economy of large-scale production is increased opportunity for specialization and division of labor. As already suggested, greater specialization means reduction of the *number* of responsibilities and activities assumed by individual operating units in production, both units of men and of mechanical equipment. This permits greater *standardization*, meaning greater uniformity in productive processes, resulting in greater out-

put for every dollar of expense incurred. Standardization is one of the most marked characteristics of modern industrial processes, equipment, and products. It seems possible, however, to carry standardization so far as to destroy some of the individual initiative of the worker. But closer cooperation between employers and employees helps to prevent this outcome.

Administrative problems are now urgent. Organization and management are the main divisions of administration. Organization, fundamentally, is the division and arrangement of all the physical and human factors in a business. Management supervises the activities of the organization. Good management rests upon good organization—for which the management is responsible and of which it is a part. While organization involves division of both physical and human factors, management, as such, involves only the division of human responsibilities; and these human responsibilities must be *supervisory* in nature to distinguish them from skilled or common labor.

Scientific management is the use of scientific methods in discharging the responsibilities of management. These responsibilities are, first, the attainment and maintenance of scientific organization—that division and grouping of all functions of a business so that each function and all of them together may be performed in the *one best way*. In the second place, scientific management holds itself responsible for the use of the organization at its command, so that each part shall be loaded with responsibilities to its full capacity, so that no part shall be overloaded, so that each part shall discharge its assigned responsibilities at the least cost, and so that cooperation and coordination of all parts within the business shall be best conserved and promoted.

Management is scientific in so far as scientific methods are employed in achieving the foregoing objectives. Scientific methods, more specifically, are those which determine the best available materials, tools, equipment, and

processes by means of accurate comparative observations and measurements of the time and space employed in processes and of the material qualities in supplies, tools, and equipment. These scientific methods are in contrast with so-called rule-of-thumb practice, which relies on traditional methods passed along from time to time with their accumulation of improvements acquired largely in hit-or-miss experience—without any *deliberate* attempt to acquire them except from occasional efforts which, as a rule, are forced by immediate necessity. Thus the main difference between scientific and unscientific management is a difference in the degree of *conscious* deliberation employed in the effort to lower the cost of production.

Scientific methods have been employed intensively (1) in establishing standards for the best speeds at which machines may be operated, including alterations in tools and machines which make maximum speeds possible, and (2) in finding the most economical movements or motions by which the laborer may accomplish his task, including improvements in working conditions which permit the worker to perform his task in the least time and with the least effort. Another specific aim is the payment of differential wages to workers—wages designed to parallel individual differences in accomplishment, including consideration of the part played by the individual laborer in reducing “capital costs” by increasing his product per unit of time. These capital costs are rent on the space occupied by the laborer and his machine and materials, the money capital tied up in his machine and tools, supervisory expenses; in short, all *fixed* expenses which accrue regardless of the laborer’s output.

It is apparent that the amount of fixed expenses *per unit of product* varies with the amount of the laborer’s output per unit of time. If, for instance, the fixed expenses of operating one machine, apart from the cost of labor, is two dollars an hour, and one laborer uses that machine in producing 100 parts an hour, the overhead cost per part

is two cents. If, as a result of improved management, the laborer produces 150 parts per hour, the fixed expenses per part would fall possibly to one and a half cents, saving fifty cents per hour. Part of this saving is often given to the laborer—the amount depending upon practical considerations, since an exact scientific determination of this amount is apparently impossible.

Such “differential wages” are often used and the methods of computing them are sometimes quite complicated. The *standard* output per hour or day for one operation is often fixed by very careful scientific tests. Then the rate of wages per day or hour may vary with the laborer’s ability to approach, or to surpass, the standard.

Scientific management also includes a scientific division and assignment of functions among the managers and foremen, with a decrease in the number of functions for which they are individually held responsible. For instance, in a scientifically managed manufacturing plant, we may find the “speed boss” who is responsible solely for running the machines at the best speed, and the “repair boss,” whose sole responsibility is to see that machines are kept in good repair. This is often called functional management.

In general, scientific specialization aims to employ exceptional talents more exclusively on the kind of work which requires them. The main line of division is between brain work and manual labor. The “planning department” may include a large number of specialists who plan all operations down to the detailed specifications of the men, machines, methods, and materials to be used, and the order in which they shall be used, in putting through each new job.

Current development in scientific management lies in the direction of specialization in solving general administrative problems which tend to become more serious and more difficult to handle the larger the scale of production.

A very general limitation on the scale of production is found in the economic *law of diminishing or non-proportional returns*. This law, first applied to land, states that if more and more men are set to work on a piece of land, the time comes sooner or later when the output of the last man added becomes less than the output of the man added before him. This may be called the "point of diminishing returns," but it is not necessarily the point of diminishing returns *per man*; for it is possible, although improbable, that an additional man may add relatively less returns than the man added just before him and yet cause the *average* return per man to be higher.

When the average return per man begins to fall as more men are added, this is sometimes called "the point of diminishing productivity" to distinguish it from "the point of diminishing returns." Some economists, however, make no distinction between them. (In the following discussion, the author has in mind the point of diminishing average returns or the point of diminishing productivity, when the point of diminishing returns is mentioned.) Up to this point of diminishing returns, the output per man increases or at least remains stationary. The significant fact is that there must be, sooner or later, when additions of labor—or of capital, or of both labor and capital—are indefinitely applied to a piece of land, a point where the returns begin to show a decrease in proportion to the amount of labor—or of capital, or of both labor and capital—that is added.

It is apparent that this law applies to additions of labor and of capital in manufacturing industries as well as in agriculture. *Sooner or later*, in the development of any enterprise, a point is reached after which additions of labor and capital do not yield a proportional increase in product. However, the point of diminishing returns, or the point of diminishing productivity, does not necessarily fix the point of practical maximum development of an establishment. That maximum is determined by the point

of greatest attainable net profits—the point at which the total cost of production and total income from sales show the greatest possible difference.

This law is of great practical significance in its application to a single manufacturing establishment. It is a danger signal to a manufacturer when the expense of additions of labor and capital in his plant begin to cause an increase in the cost per unit of his product. Other things equal, it is the time for him either to increase the size of his plant or to establish a new plant. But, again, this is not necessarily the point at which he will stop adding labor and capital in the old plant. That, as already stated, depends upon the point of maximum net profits which may or may not permit an increase in cost per unit of product. It may be said that an individual manufacturer can profitably increase his additions of labor and capital up to or beyond the point of diminishing returns, provided only that he can find a market for his total product at a price which would yield him a better total net profit.

One of the prime reasons for cost accounting is to determine the point of diminishing returns—in departments and in subdivisions of departments, as well as in the establishment as a whole.

Scientific management, in its effort to lower costs of production, tends to drive the point of diminishing returns further and further ahead in any industrial unit. But the applications of scientific methods must also always be limited by the profit and loss account.

In general, the business man's problem of production is to employ the best combinations of nature, labor, and capital—the combinations which yield the best total net gain of product with the least real cost. His skill in accomplishing this is his justification for receiving that share of the returns which are called profits. This is treated in Chapter VII.

Economists are interested primarily in increasing the

productive capacity of capital and of labor, and in decreasing the real costs of production in general. They desire the attainment of "economic equilibrium" in the production and the consumption of wealth, with a continuous increase in the number of wants, particularly the "higher" wants, that may be satisfied, and with continuous improvement in the means of satisfying many wants.

The World War upset this equilibrium. True, decreased production of some things in some of the warring countries was perhaps more than balanced by increased production of many of these things in other countries. But lack of adequate transportation facilities, the risks, the delays, and the high cost of shipping, among other causes, made much of the world's stock of materials and products unavailable when and where they were needed—entailing considerable actual loss, especially of perishable goods. Furthermore, although production as a whole was increased, the production of commodities which were relatively non-essential in time of war, was greatly curtailed. Surplus stocks were exhausted. The stocks of many commodities fell far behind the potential peace-time demand for them. There is now, therefore, great need of emphasis upon both increased production and upon wasteless consumption, in order to recover, as soon as possible, the normal equilibrium of supply and demand.

CHAPTER VI

The Consumption of Wealth

It has become traditional to include the subject of *consumption* among the main divisions of economic science on the same level with production, exchange, and distribution. But as yet, few economists have found very much, relatively, to say about consumption. Perhaps the main aspects of this division are (1) the application of the principle of marginal utility in selecting the wants that are satisfied, (2) the statistics of consumption, (3) necessities and luxuries, (4) saving and spending, and (5) consumers' cooperation.

Most consumers have a limited income to spend and are faced with the question of how to spend it so that they can get the most for their money. If they spend more in satisfying one want or one group of wants, they, of course, must spend less in satisfying other wants. It is here that the principle of diminishing utility, explained in Chapter II, is of some significance. It applies to each particular kind of goods bought for consumption. Thus a man might spend five dollars for a pair of shoes and then five dollars more for a second pair, and he might possibly buy even a third pair. But after he has the first pair, or the second, or the third, he will not want an additional pair intensely enough to justify its purchase in view of the fact that the same five dollars would bring him more satisfaction if spent, for example, for a new hat, or for amusement of some kind. There is also a point beyond which he will not spend money for hats or amusement. What he tends to do, in reality, is to carry his purchase of each particular kind of goods or services to such a point that he will get as much satisfaction out of one dollar spent along one line as for one dollar spent along another. A dollar, then, represents to him a certain amount of utility, corresponding to the amount of satis-

faction he gets from the expenditure along any of the lines involved. For persons with large incomes, of course, the marginal utility of a dollar is usually less than it is for persons with smaller incomes.

Some careful studies have been made in order to find out just what differences are to be found in the expenditures of families of different incomes. All these studies have tended to show that for food, the poor spend a larger percentage of their income than the middle class and the rich; that the percentage spent for rent, fuel, and light is about the same, regardless of income; that the percentage spent for clothing is also about the same; and that the percentage spent for legal protection, health, and comforts increases as the income increases. These studies, in other words, confirm common observation, which shows that surplus income is likely to be spent for the satisfaction of the "higher wants." Exact figures obtained by such studies are often of great use to social workers and to public authorities who are interested in establishing the meaning of a decent standard of living and in taking measures to bring the earning capacity of individuals and families up to the point necessary to enable them to live according to such a standard.

The discussion of necessities and luxuries requires some attempt to distinguish between them. No sharp distinction seems to be possible, because articles that seem like luxuries to a young man of twenty on a salary of twenty dollars a week, because they are out of his reach, come into his reach, perhaps, by the time he is thirty and has an income of, say, fifty dollars a week. He buys them, forms the habit of using them, comes to think of them as necessary, and stops looking upon them as luxuries. About the only practical importance of distinguishing necessities from luxuries arises out of the growing popular belief that industry ought to produce necessities for everybody before it produces any luxuries for anybody. This proposition means,

for instance, that until the masses of people are well fed and well housed, there is something wrong about allowing anybody to have broiled lobster and two or three country houses. This proposition seems obvious enough. The only difficulty about it arises from the fact that the opportunity to spend one's income as foolishly as one likes, seems to be a strong motive for causing many people to *earn* a large income. Remedies suggested range all the way from admonishing the rich against ostentation to advocating such public ownership and operation of industry as would permit the limiting of all incomes to some level close to that of the present average income.

The contrast between saving and spending, as these topics are commonly discussed, is in reality a contrast between two different kinds of spending: one upon articles of immediate consumption, such as clothes; the other upon articles that may be used in production, such as buildings and machines. It is plain that retail clothiers, for instance, rejoice when people spend more money for clothes. But if people save this money instead and invest it perhaps in the stock of a shoe factory, where it may be used for adding to the machinery, an ultimate increase in the output of shoes will result—or it may, of course, be invested in any other productive industry. Many people who wish to buy the products of industry, shoes, for example, will not sympathize too much with the idea that people with money ought to spend it upon articles for their own consumption instead of investing it where it will increase the production of shoes.

It might be mentioned, on the other hand, that the incomes of some people are too small to justify any attempt on their part to save much money for the purpose of accumulating capital; for example, to deprive their children of really necessary clothes in which to attend school in order that money may be laid away in the bank. This may do the children more harm than will be compensated by the advantages derived from the use of this

money as borrowed from the bank for some industrial purpose.

It seems to be a mistake to think of ostentatious extravagance as justified on the ground that "it causes employment for labor." One thousand dollars spent on an expensive banquet does cause employment for labor—that of caterers, waiters, florists, and so on; but, of course, that same one thousand dollars, if invested in a manufacturing enterprise, for instance, would cause perhaps much more employment for labor. Factory employees, therefore, could not be expected to accept arguments advanced to defend expensive banquets.

There is a growing feeling on the part of consumers that they are at a commercial disadvantage as compared with producers and middle men. When they see prices rising, for instance, it often seems to them as if producers were taking advantage of their position to exploit the ultimate consumer. This feeling sometimes prompts them to attempt combinations of consumers patterned after the combinations of producers and dealers that are believed to be so numerous. They hope that their combined buying power will enable them to obtain lower quotations and also that their ability to boycott some single article, such as eggs, will force a decline in its market price. The idea back of this remedy is sound enough. Practical difficulties in executing it arise from the large number of consumers, from their lack of acquaintance with one another, and from the fact that the possible saving for each individual is not likely to be large enough to enlist his interest for a very long time. Every such attempt also meets the problem of finding somebody to run the organization of consumers without requiring a salary that would absorb all the gain. A surprising fact, however, demonstrated by Belgian experience, is that good managers for enterprises conducted on the cooperative principle can be obtained, under favorable circumstances, at lower salaries than

the same men could command in private enterprises of the usual type.

Consumers' cooperation seems to work best when it takes the form of financing retail stores for the benefit of the members of the cooperative association, who turn their patronage so far as possible to their own store. Such stores have been widely established in England and elsewhere. A considerable number of them are now in the United States. Sometimes a group of such retail stores are combined for the purpose of running a wholesale store. The movement in this direction has been steadily growing, especially where members of the cooperative association belong to the same class of buyers and have some strong common interest to bind them together. Sometimes this interest is an almost religious faith in the cooperative principle; more often it is an outside interest, such as that which grows up among the members of the same trade union, or among the members of a group of reformers, such as socialists, who make out of the cooperative enterprise a kind of neighborhood center and a center of propaganda.

One of the principal reasons why economists have never found much to say about consumption is because the amount of goods and services available for consumption depends altogether upon the efficiency of production. Yet wastes of consumption amount to the same thing as curtailment of production. To more wisely select the wants to be satisfied, to make better selection of the means of their satisfaction, and to gain the greatest possible satisfaction out of the means selected to satisfy wants; such seem to be the principal aims of economic consumption. The spreading habit of "keeping books" for the household is an important step in this direction. The solution of the problem rests largely upon the shoulders of the *individual*—and the individual will perhaps do more intelligent spending and saving and better investing when he catches a broader vision of the force of wasteless con-

sumption as a factor in raising the general standard of living, including its influence upon his own individual opportunity to satisfy more of his "higher" wants.

Again, it is well to emphasize the fact that wastefulness in consumption amounts to the same thing as a decrease in the production of wealth. It is difficult, however, to say exactly what constitutes wasteful consumption. Perhaps it may be said that all destruction of, or all the using up of, commodities and services in excess of the amount required for the satisfaction of wants, is wasteful consumption. But whatever may constitute economic waste, it is quite true that all intelligent economy helps make possible a higher *general* standard of living.

CHAPTER VII

The Distribution of Wealth

Distribution, in Economics, is not the commercial process of getting goods from factories to consumers; but it is the study of incomes: why some have greater, or smaller, incomes than others.

An important division of incomes is between those which are derived from the ownership of property and those which come from the sale of personal services. Income from property may arise out of the ownership of land or out of the ownership of capital. The line between land and capital is roughly drawn. Land, as stated elsewhere, includes everything that may be considered a gift of nature, such as soil and minerals, while capital includes everything that is both produced and devoted to further production.

A more complete classification of incomes, very commonly employed, is that of rent, wages, interest, and profits, corresponding to four classes in society: land-owners, wage-earners or laborers, capitalists or investors, and business men or enterprisers. These four incomes arise from *prices* paid for the use of land, labor, and capital, and for the efforts of business men who succeed in combining units of land, labor, and capital into productive enterprises. One who understands how the prices of goods are determined, as explained in Chapter II, including such matters as the law of supply and demand and the law of the normal competitive price, has a key to the understanding of how incomes are determined.

Economists focus attention upon the *national dividend*, sometimes called the *national income*, which may be said to consist of all the commodities and services consumed by all the people in a given year. This national dividend is not money, but is only measured in money. It is assumed that the whole of this "dividend" goes to the four

classes of people mentioned above, who are assumed to make up the whole of the community.

No part of the national dividend, of course, goes to anybody who has nothing salable to sell. Only persons possessed of either land, or capital, or the capacity to render valuable services can enjoy part of the national dividend—unless they steal some of it or have some of it given to them.

The prices of land, labor, and capital are decidedly interdependent. Changes in the prevailing market price of any one of them will occasion changes in the prices of both of the others and corresponding changes in the incomes of the different economic classes in society. The process of adjustment, which always takes time, works itself out through the so-called *principle of substitution*, explained in Chapter II. Alert business men, observing the technical or mechanical results which they can obtain from a dollar's worth of labor, a dollar's worth of the use of capital or of the use of land, will substitute more or less of the one for more or less of the other up to the point at which no further substitution of this kind is profitable.

It is the central idea of this explanation that changes in the price of almost anything, whether it be an article of consumption or a productive resource, will tend to cause changes in the prices of almost everything else.

If an increase in the supply of labor, occasioned by a natural increase of population or by immigration, takes place—without corresponding changes in the available stock of land and capital—the national dividend will increase, though *not in proportion* to the increase in the supply of labor, because of the operation of the law of diminishing productivity, or the law of diminishing returns, explained in Chapter V. Wages will tend to go down relative to rent and interest. If the increase in the labor supply results from a business depression, however, the available supply of capital may increase as fast

as, or even faster than, the available supply of labor; and this may cause interest to decrease as fast as, or even faster than, wages. This condition is the more possible now that the operation of the federal reserve system makes a greater supply of capital available in times of business depression. Both the banks and the people are now less inclined to draw money from circulation when business conditions look to be unfavorable. A *relative* increase in labor, however, would tend to cause a *relative* decrease in wages; while an increase in the supply of land, occasioned perhaps by improvements in transportation, or an increase in the supply of capital, resulting perhaps from an increase in the income of persons who are both able and willing to save, will tend to cause a relative increase in wages. This increase in wages, in turn, adds to the potential supply of capital.

The actual supply of available land, though it has increased perhaps as rapidly as either population or capital during the last century, cannot be expected to increase so rapidly in the future, because no new continent remains to be opened up. The supply of capital, accumulated hitherto mainly by persons of large income, either may or may not increase as fast as either population or the supply of land. Consequently, it is commonly asserted that only a slackening in the rate at which population increases can prevent an eventual fall in wages, accompanied by an increase in the rate of rent and the rate of interest—*unless* the progress of discovery and invention in technical fields keeps up.

It is a matter of common observation, both in urban and rural communities, that all land sites are not of the same desirability. Some farms are more fertile or better located than others, some urban sites better located for particular uses than others. It may be difficult to find farms or sites of no use, but there exists a valuable differential between the poorest in use and the better grades. *Economic* rent arises solely from the superiority

of the location and of the *natural* qualities of the soil as compared with "no-rent" land, or "marginal land," which, by virtue of its location and natural qualities, yields no greater return than just enough to pay for the capital and labor employed on it. Thus "economic rent" differs from "rent." When a farm, for example, is rented for, say, ten dollars an acre, part of this price is in reality payment for, or the "hire" of, capital goods or "improvements."

Whichever users of land within any kind of business can use it to best advantage will tend to be the ones who succeed in renting it; and those who own land that is more suitable or better situated than the worst in use, will draw economic rent.

The existence of economic rent, comprising altogether a considerable share of the national income, does not depend upon the private ownership of land, but it does depend upon the natural scarcity of land, especially land of the right kind, rightly situated. David Ricardo stated, a century ago, that the prices of goods are not high because rent is paid, but rent is paid because the prices of goods are high.

However land be owned, no one has ever seriously advocated that the sale of the use of land, according to the present competitive method, should be abrogated. The prevalent practice, by which the use of preferred sites is bought by the highest bidder, is the only insurance that the available land will be distributed, among those who use it for production, in proportion to the economic importance of the uses to which they respectively put it.

The rate of interest, from the viewpoint of the "buyer" of capital, is price paid for the use of capital; from the viewpoint of the "seller," it is the price paid for "waiting." This price depends upon the relative **scarcity of capital**. Fluctuations in the price of the use of capital afford the method by which those who can find the best commercial use for it may obtain the preference.

When the need for developing an industry puts that industry in a position to pay high rates of interest, if necessary, for the use of capital, the freedom of the market which enables it to bid up the rate beyond the low figure possible to operators of some other industries, enables it to have the preference. Another function of the rate of interest, often emphasized, is to cause that amount of thrift or saving required to make available the capital funds required in industry. Another is to prevent unnecessary risks of capital. The use of capital in production is treated in Chapter V.

The foregoing principles also apply to wages. Laborers get wages because an adequate supply of labor, under existing conditions of demand for it in industry and trade, cannot be had from persons who are willing and able to work for fun. The rate of wages for any class of labor, from the most unskilled to the most skilled, and the most responsible, rises in response to the increasing demands of employers who can use much of it to the best commercial advantage—and prevents the employment of much labor by employers who can use it only with less advantage.

Profits differ from rent, wages, and interest, because they are much more contingent upon the success of the enterprise. The enterpriser or business man, who makes profits, assumes more responsibility and risk than the wage earner, who knows in advance how much he is to receive. Similarly the enterpriser differs from the capitalist and the landlord. When an enterpriser renders himself services that he might sell on the market, or uses land of his own, or capital furnished by himself, his gross income will consist only in part of pure profits, the remainder being wages paid to himself—called wages of management—and interest and rent paid to himself, figured at the prevailing market rates. If the sum of rent, wages, and interest paid to himself as well as to others, is not less than the total proceeds for any year's oper-

ations, the enterpriser has made no pure profit for the year.

Competitive profits are to be distinguished from monopoly profits. Competitive profits accrue from sales of products or services made at the current market price and require some ability to keep expenses down. Monopoly profits are made from some control of the price which enables the enterpriser to keep it above the competitive level. Competitive profits serve as an inducement to produce at low cost and are generally considered to be socially advantageous. Monopoly profits, however, are almost universally frowned upon. State control of rates or prices charged by monopolists, explained in Chapter III, indicates this social disapproval.

Competitive business tends to force the less enterprising to copy the methods and ideas of the more enterprising. This competition, in the end, either lowers the market prices of production or raises the expenses of production by increasing the demand for materials, equipment, and labor, causing their prices to rise. In either case unusually high profits tend to be wiped out. They can be retained only by keeping persistently ahead of competition. But a certain portion of competitive profits is in return for ability and willingness on the part of business men to risk their own labor, their own capital, or their own land, instead of marketing these things more directly. Men who are willing and able to assume an amount of responsibility in excess of those who directly sell their services or the use of their capital or their land, are not so numerous that they can be induced to do their work for fun, and, therefore, almost all market prices may be expected to be permanently high enough to afford compensation for the assumption of this responsibility. This minimum of profit, therefore, is not one which the operation of competition tends to eliminate altogether. But profits will tend to decrease, as time passes, with

increases in the amount and sanity of competition which tend to decrease the risks.

It is important to note that one kind of risk or responsibility assumed by enterprisers is a kind against which no insurance can be purchased. A business man can insure the lives of trusted employes, take out policies against losses by fire, theft, and the like, but after he has insured himself to the fullest extent, there remains the possibility that some of his calculations with regard to the market for his product, or the prices at which he buys his materials or his labor, will miscarry and subject him to loss.

Profits are residual. They are what is left, if anything be left, when the bills for rent, wages (including wages of management) and interest are all paid. They are primarily payment for the assumption of business risks.

Such, essentially, is the economic analysis of rent, wages, interest, and profits. The gist of the general reasoning upon the subject of distribution amounts to a demonstration that the institution of the market, as it operates competitively upon the prices of land, of labor, and of capital, accomplishes such utilization of these factors in all the various lines of production as will serve to adjust production to the various demands of consumers.

Almost all the practical implications of this general conclusion bear some relation to public policy. Perhaps the most important implication is that monopolistic control of the market must, as a rule, be rigidly prevented. Special privileges, such as those granted by copyrights and patents, must never be permanent, and seldom widespread. Wherever education or "publicity" of some kind is necessary to put potential competitors in possession of essential information, then public policy must furnish this education and accomplish this publicity. Improvements in the welfare of any class in society must be sought through the kind of education which will qualify individuals to earn more, rather than through attempts to

exercise much direct control upon any kind of market price, including wages, interest, or rent.

Few economists attempt to pass ethical judgment upon the righteousness or unrighteousness of the prevailing rate of interest or of wages, or upon the beneficence or malevolence of the institution of private property in land or capital. All such questions require considerations which lie so far outside the special field of economics that the opinion of other specialists and of laymen, especially in a democratic age, must command at least equal attention. It might be said, however, that most economists are by radicals considered very conservative, and are by conservatives considered decidedly radical. There seems to be a tendency among economists to share in the growth of popular discontent with things as they are and to take an active part in measures of social reform. Many feel that justice in the field of distribution does not now prevail, by reason of the accumulated iniquities of history—which iniquities, however, are not inherent in the institution of the market. Many feel that social and political movements seem to be in the process of removing injustice in the distribution of wealth.

CHAPTER VIII

Special Problems of Economics

Many economists give a very large part of their attention to the special problems of economics. The books and treatises of modern economists are commonly confined to discussions of single problems, such as the problems of labor, of transportation, of foreign trade and the tariff, agricultural problems, social problems, taxation; also problems of industrial management, such as labor turnover, hours of work, welfare activities, and so on. More recently, the major problems of finance, of organization, of marketing, and of selling are also scientifically studied. The laws and principles of this science, as presented in preceding pages, underlie the correct solution of nearly all these special problems; and the reader who desires to acquaint himself more fully with extended discussions of many of these problems will be helped greatly by first making sure that he has a thorough understanding of these essential principles and laws.

Following are very brief surveys of a few of the more important of current economic problems.

The first great problem to confront economists, and one to which they have always given a great deal of their attention, is that of public finance, or taxation—which is considered by some economists from the point of view of the system which causes a share of the national dividend to flow to all the people as a whole through various governmental channels; in other words, as part of the general economic problem of the distribution of wealth.

Governments have long supplied the individual citizen with many things which he formerly supplied for himself, such as highways and schools, and many kinds of "public institutions"; and in recent years governments have greatly extended the variety of services they render to individuals—which is the main cause of increased

taxation in the United States. To secure adequate revenue for these increased services and to secure it with justice to all citizens, are the leading problems of taxation.

Early students of public finance held that justice in taxation was obtained when the individual paid in proportion to his benefit, as an individual, from public expenditures; known as the *benefit principle*. But the impossibility of measuring some of the benefits to the individual, as in the case of the navy, the judicial system, experiment stations, and the like, has led to the abandonment of this principle. It is now generally held that a tax is most just when it is levied in proportion to the individual's ability to pay; known as the *ability or faculty principle*.

Justice as measured by ability to pay is a paramount issue. But some believe that justice is best gained by a combination of several taxing principles; and a few advocate the abolition of all taxes except a tax on the "unearned increment" of land; that is, on the increase in the value of land which arises from other causes than that of the exertion of the owner of land. This is the argument of the "single taxers."

Taxes are sometimes classified as *direct* or *indirect*. A direct tax, like the income tax, is paid directly by the individual who is taxed; while an indirect tax, like the federal excise tax on tobacco, although paid by the manufacturer, is shifted from him by means of a higher price, causing the tax to be paid ultimately by the consumer. Another classification of taxes is that which divides them into *progressive*, *proportional*, and *regressive* taxes. A progressive tax, which means an increase in the *rate* according to the increase in the *base*—base meaning the factor upon which the tax is based, such as income—is considered to be more just than a proportional tax, which means the same rate regardless of changes in the base; because to take the same proportion of a large

as of a small income, for instance, does not involve the same amount of sacrifice. Likewise a regressive tax, which means a heavier burden on a small base than on a large one, is considered unjust. Seldom is a regressive tax deliberately levied, although many customs and excise taxes are, in effect, regressive, since the richer classes do not consume enough more of the taxed commodities, such as tobacco, to make the tax proportional.

The functions of state and local units of government are also expanding rapidly. Most American states have relied, in the past, mainly upon the general property tax, which attempts to assess every item of almost every kind of property owned by everybody at a percentage of the market value of the property. But many kinds of "intangible" property, such as stocks and bonds, are never listed. Attempts to patch up the general property tax have not met with very great success. Many students of the problem advocate doing away with the attempt to list every kind of property and developing instead various kinds of special taxes, like those on inheritances and incomes.

People in general disagree upon the extent to which the state should expand its functions. But almost all economists look with favor upon the expansion of public functions. Few, however, espouse any plan of taxation which would amount to a radical transformation of the institution of private property. It must be taken into account that taxation may be extended to a point where enterprise and accumulation would be discouraged.

The need for better methods of handling the large amounts of funds entrusted to the government to spend for the good of all its citizens, is evident. Just as antiquated methods of accounting will no longer meet the needs of private business enterprise, so they will not now meet the need of handling public funds. Modernized and standardized methods of accounting, including accurate budgets, sinking funds, cost accounting, and so

on, are the principle aims of those who are trying to gain better results from the use of public funds; and many governmental units have now given up guess-work and are using modern methods of estimating budgets and of distributing expenditures. Many states and cities and townships and counties are now making loans and providing for their payments as efficiently as this practice is carried on in the best of private enterprises.

Other social problems, often called problems of "social reform," are not so strictly economic problems. Yet economists have always had something to say about social reforms, although they have never assumed to say the last word nor even the most important word. Certain kinds of social reform, like the movement for segregating the feeble-minded and preventing their propagation, do not touch this science very closely. But others, like socialism, fall very largely within the field of economics. The proposals for social reform, with which economists are commonly concerned, include anarchism, communism, various forms of socialism, and social democracy.

The distinguishing characteristic of anarchism as a social movement is its intolerance of anything like coercion, especially coercion that is exercised by governments. Anarchists would like to abolish any kind of government which exercises compulsory authority, as in the collection of taxes or in the raising of armies. They would prefer to see public affairs conducted like the affairs of a single large family. There are obvious reasons, of course, why such a movement has a very weak following in any seasoned democracy like the United States or Great Britain. Anarchists have more followers in places where the government has been oppressive and autocratic. They belong to two schools, which are sometimes called the "revolutionary" and the "evolutionary" schools. The evolutionary school confines its attempts at reform to talking and possibly refusing to vote and to pay any taxes; while the revolutionary school believes in the use of vio-

lence to attain its end. Sober students of economics consider the influence of both schools, in a reasoning democracy, to be negligible. Anarchism is a philosophy of despair. It cannot flourish where living conditions are generally good and where the governing classes are responsive to the wishes of the governed.

Communism is a social movement which proposes to abolish the right of *individual* ownership of property and to have collective ownership instead—presumably to have all property owned by units of people consisting of relatively small communities. And so, communism could abolish the use of money, and consequently break up the existing world and national markets into myriads of little markets, each one coextensive with something like a neighborhood. No large-scale industries could thrive under such conditions. The number of wants supplied would be greatly restricted. The affairs of each small community could be administered, it is supposed, by neighborhood gatherings, in which general agreement would determine just what each person is to do in the community and just what he is to get for doing it.

There is something very sociable about communism. As a general movement, however, it is insignificant, especially in western nations, although it has had considerable following in parts of Russia. Bolshevism partakes somewhat of the nature of communism, explained later on.

Of all the movements of reform, socialism is the one of greatest moment. It is of several varieties, the main one being that of the school of Karl Marx, which accepts the Marxian doctrine of social evolution—looking toward the ultimate downfall of the capitalistic class, when labor alone is to control all industry.

Socialism finds its support mainly among wage earners, although its leading ideas have been developed by thinkers who came originally from other classes in society. Its central aim is, in some democratic way, to in-

crease the extent to which the common people control governments; and then to use this power of control to eliminate—either gradually and with some kind of compensation, or suddenly and without any nice regard for private property—those classes in society which own the land and operate industries. Unlike communism, however, socialism would not abolish all private property, but would confine it to goods used for personal consumption, such as food and shelter; production being carried on entirely through the state. It would substitute state enterprise on a vast scale for the present combination of private and public enterprise. It is distinguished from communism, therefore, both by the scale of its proposed operations and by the fact that it does not propose to do away with the use of money and the method by which people sell their services and buy the things they want.

Bolshevism seems to be essentially nothing less than an extreme form of socialism somewhat mixed with communism. It was born under conditions in Russia which would be impossible in any civilized democracy; and it preaches some of the ruthlessness and the high-handedness that afflicted nearly all Russian parties at one time.

On its political side, Bolshevism utilizes a unit of government—called the *soviet*—which ranges in size from the smallest neighborhood up to the country as a whole. It has exploited the rich and well-to-do by violently insisting upon the transfer of landed estates from the nobles to the peasants. It has decreed equal distribution of wealth and income; thus putting a premium on poverty. The Bolsheviks also have ambitions for the governmental operation and ownership of railroads, banks, mines, and factories.

Socialism in Anglo-Saxon countries most commonly takes the form of social democracy or liberalism. It is disposed to make both political and economic changes

in a democratic direction, but to make them gradually and experimentally. It is political rather than industrial in method, and it relies upon popular discussion and the ballot rather than upon cruder forms of social pressure, such as riots and general strikes, although coercive methods do have some place in it.

The socialistic program in countries like England and America is likely to be one which takes something from various programs advocated by various groups of social reformers. Many economists feel that this program will include an expansion of public functions, an increase in public revenues, the placing of higher taxes upon the well-to-do and upon receivers of funded incomes, general acceptance of trade unionism and collective bargaining, and greater development of all kinds of public education.

While economists have given considerable attention to the foregoing problems of social reform, their chief interests lie in the direction of problems that are more strictly economic in nature. Labor problems in particular have commanded an increasing amount of attention. Regarding wages, economists in general seem to be coming to believe in the determination, either by the state or by supervised collective bargaining, of the minimum wage below which qualified workers may not be permitted to be employed—leaving the market free to move up and down in all ranges above the minimum. They commonly approve the fixing of the minimum wage by means of collective bargaining—where collective bargaining does not involve the “closed union” (a union which is closed to all except those whom the present members arbitrarily desire to let in) which is considered to be monopolistic, and therefore should be subject to public control, like any other monopoly.

While economists as a whole look with decided favor upon collective bargaining, they also realize that trade unions do not include the great mass of the workers.

To meet the needs of non-unionized labor especially, legislation of different kinds remains necessary, including laws against child labor, against excessive hours of work for women, against the use of dangerous machinery or poisonous processes, and the like; also including the development of social insurance, built up by contributions from the state as well as by contributions from employers and employees, beginning with so-called workmen's compensation acts for injuries during employment, and proceeding gradually to insurance against old age, sickness, and even unemployment.

The principal difficulty in the application of any economic or social reform, as it applies to industry, lies in the fact that there is infinite variety in the conditions under which industrial operations are carried on; and it becomes impossible, except in the most fundamental reforms, to make their adoption possible under a general rule. An attempt to apply universally any scheme of industrial or social reform invites the risk of setting up an arbitrary or autocratic control that will be destructive of progress. Only as reforms are found applicable to industries can they be introduced without grave danger.

Thus economists study nearly all the problems of industry, especially those problems which affect the welfare of the nation as a whole. And individual economists tend to specialize on the study of specific parts of these more general problems. For detailed treatments of many of the current economic problems, the reader is referred to the following list of classified references.

APPENDIX

Classified References

The literature of Economics is so extensive that the reader who wishes to extend his study along particular lines of the subject may find the following list of classified references to be helpful. An effort has been made to select readings of standard quality.

1. General Economics

TAUSSIG, F. W. *Principles of Economics*, 2 volumes, 1911, Macmillan.

This work covers very completely both the principles and the major problems. It is considered by many as the leading American work on the subject.

GIDE, CHARLES. *Political Economy*, 1914, Heath.

Professor Gide is a French economist of high rank. He writes fluently and interestingly without sacrificing accuracy for scholarship. Many business men prefer the American translation of this book to similar books by American authors.

CLAY, HENRY. *Economics: An Introduction for the General Reader*, 1916, Macmillan.

This is an interesting treatment of the whole field of Economics by an Englishman who expresses himself so that the general reader can readily understand him. The American edition of this book, edited by Agger, substitutes American illustrations and examples for Clay's English ones.

ELY, RICHARD T. *Outlines of Economics*, 1916, Macmillan.

This is a recently revised book which is used widely as

a college text on general economics. It includes a very complete but brief history of economic thought.

THOMPSON, CHARLES MANFRED. *Elementary Economics*, 1919, Sanborn.

This a simple and practical treatment of the principles and problems of economics. Written primarily for high-school students, it includes exceptionally good exercises and review questions, many of which are designed to stimulate constructive and independent thought.

2. Price and Price Changes

As suggested in many parts of this book, this subject is the hub of economic theory. Its current importance has led to the publication, recently, of many pamphlets and articles which treat specific parts of the general problem. The literature on prices may be divided into the fundamental factors of price determination, including "quantity" and "anti-quantity-of-money" theories—treated in Chapters II and IV of this book; and, on the more practical side, into wholesale and retail prices.

The Bureau of Labor Statistics, Washington, D. C., has published a great deal of material on retail prices and the cost of living, including much descriptive material as well as statistics. In fact, a great deal of what has been written on prices during the last decade has been based on the statistics gathered by this bureau.

Bulletin No. 173, published by the Bureau of Labor Statistics, is a comprehensive report on index numbers.

Several New York banks have published, within the last year or two, many monographs which contain much good material on prices and the cost of living; notably the National Bank of Commerce, the Irving National Bank, the National City Bank, and the Guaranty Trust Company.

Some of the more general treatments of this and related subjects follow:

LAYTON, WALTER T. *Introduction to the Study of Prices*; with special reference to the history of the nineteenth century, 1912, Macmillan.

SCOTT, WILLIAM B. *Money and Banking*, 1916, Holt.
This presents the anti-quantity-of-money theory.

FISHER, IRVING. *Why the Dollar Is Shrinking*, 1914, Macmillan.

This "study in the high cost of living" is a thorough but somewhat involved discussion of the purchasing power of money. It presents the quantity-of-money theory.

JONES, E. D. *Economic Crises*, 1900, Macmillan.

This is a scholarly treatment of this much discussed but little-understood subject.

3. Domestic Trade and Exchange

WELD, L. D. H. *The Marketing of Farm Products*, 1916, Macmillan.

Many consider this book the leading authority on the subject of marketing in all its phases.

HOLDSWORTH, J. T. *Money and Banking*, 1917, Appleton.

This book covers money, credit, banking, and prices. Its treatment of domestic exchange and of the Federal Reserve Banking System is adequate for the needs of nearly all business men.

LEVY, HERMANN. *Monopoly and Competition*; a study in English industrial organization, 1911, Macmillan.

JENKS, J. W. *The Trust Problem*, sixth edition, 1912, Doubleday, Page.

Professor Jenks speaks with authority on all the fundamental aspects of the trust question.

4. Foreign Trade and Exchange

SAVAY, NORBERT. *Principles of Foreign Trade*, 1919, Ronald Press.

This is a scholarly and practical book which covers nearly all of the important aspects of the subject.

VEDDER, G. C. *American Methods in Foreign Trade*, 1919, McGraw-Hill.

This is a book of facts which tells how to get foreign trade for many products. It advocates American methods.

HOUGH, OLNEY. *Practical Exporting*, 1919, American Exporter, New York.

This book also covers the subject very completely. It has met with considerable favor among business men.

VERRILL, A. HYATT. *South and Central American Trade*, 1919, Dodd, Mead & Co.

ESCHER, FRANKLIN. *Foreign Exchanges Explained*; a practical treatment for the banker, the business man, and the student, 1917, Macmillan.

TAUSSIG, F. W. *Tariff History of the United States*, 1914, Putnam.

Of the many scholarly books on the tariff, this seems to be the one which is referred to most frequently as an authority.

5. The Production of Wealth

HOBSON, J. A. *Evolution of Modern Capitalism*; a study of machine production, 1917, Scribners.

HOBSON, J. A. *The Science of Wealth*, 1911, Henry Holt & Co.

This book is a good treatment of the fundamentals of the industrial system. The author is an independent

thinker who writes clearly and to the point. Several chapters in this book treat of the distribution of wealth; in fact, this book might well be included in section 7 below.

DRURY, H. B. *Scientific Management*, 1915, Longmans.

This is a lucid exposition based on actual practice in many plants that are scientifically managed.

HANEY, L. H. *Business Organization and Combination*; and analysis of business organization in the United States, and a tentative solution of the corporation and trust problem, 1914, Macmillan.

6. The Consumption of Wealth

The literature on this subject is fragmentary. It is well covered in the works on general economics mentioned in section 1. Consumers' Leagues in many states have published many special reports, and many of the publications of the Russell Sage Foundation fall within this field. Mr. Hartley Withers has written a book on "Poverty and Waste" which merits attention.

7. The Distribution of Wealth

CARVER, T. N. *The Distribution of Wealth*, 1914, Macmillan.

This is a clear and orthodox treatment of the shares of the "national dividend" which go to the various factors in production.

KING, W. I. *Wealth and Income of the People of the United States*, 1915, Macmillan.

This is the most complete investigation of its kind in this country. It emphasizes very important aspects of the subject of the distribution of wealth and income.

NEARING, SCOTT. *Income*; an examination of the returns for services rendered and property owned in the United States, 1915, Macmillan.

8. Taxation

SELIGMAN, E. R. A. *Essays on Taxation*, eighth edition, 1914, Macmillan.

LYON, W. H. *Principles of Taxation*, 1914, Houghton, Mifflin.

9. Social Reform

RUSSELL, BERTRAND. *Proposed Roads to Freedom*, 1919, Henry Holt & Co.

This book analyzes anarchism, socialism, and syndicalism in a clear and forceful manner. The author presents the case for the radicals.

SPARGO, JOHN. *Socialism*; a summary and interpretation of socialist principles, 1912, Macmillan.

SPARGO, JOHN. *Bolshevism*, 1919, Harper & Brothers.

This is a complete, dispassionate, and illuminating treatment of the subject. It tells clearly and authoritatively what Bolshevism stands for, and how and why it developed in the light of its true historical setting.

BROOKS, J. G. *Social Unrest*, 1903, Macmillan.

This is a scholarly work by one who sees beneath the surface.

CROSS, IRA B. *Essentials of Socialism*, 1912, Macmillan.

Both sides of the question of socialism are summarized in Ely's "Outlines of Economics" and in the other books on general economics listed in section 1.

10. Labor

GROAT, G. G. *Introduction to the Study of Organized Labor in America*, 1916, Macmillan.

COMMONS, J. R. *Principles of Labor Legislation*, 1916, Harper & Brothers.

This book is authentic. It includes an interesting chapter on social insurance. It also includes a well selected critical bibliography of works on labor legislation.

COMMONS, J. R. *Labor and Administration*, 1913, Macmillan.

COMMONS, J. R. *Industrial Goodwill*, 1919, McGraw-Hill.

This is a frank talk to employers regarding their employment problems.

11. Transportation

RIPLEY, W. Z. *Railroad Problems*, 1913, Ginn & Co.

RIPLEY, W. Z. *Railroad Rates and Regulation*, 1912, Longmans.

RIPLEY, W. Z. *Railroad Finance and Organization*, 1915, Longmans.

JOHNSON AND HUEBNER. *Railroad Traffic and Rates*, 2 volumes, 1918, Appleton. .

VANDERBLUE, H. B. *Railroad Valuation*, 1917, Houghton, Mifflin & Co.

12. Immigration

FAIRCHILD, H. P. *Immigration; a world movement and its American significance*, 1913, Macmillan.

Many feel that this is the best of the numerous books on this subject. It avoids details and gives little space to the controversial aspects of the subject.

13. Finance

LOUGH, W. G. *Business Finance*; a study of financial management in private business concerns, 1917, Ronald Press.

GERSTENBERG, C. W. *Materials of Corporation Finance*, 1915, Prentice Hall.

LYON, W. H. *Capitalization*; a handbook of corporation finance, 1912, Houghton, Mifflin & Co.

14. Agriculture

CARVER, T. N. *Selected Readings in Agricultural Economics*, 1916, Ginn & Co.

NOURSE, E. G. *Agricultural Economics*, 1917, University of Chicago Press.

15. Statistical Method

SECRIST, HORACE. *An Introduction to Statistical Method*, 1917, Macmillan.

COPELAND, M. T. *Business Statistics*, 1917, Harvard University Press.

INDEX

- Anarchism, 72.
- Anti-trust laws, 20.
- Arbitraging, 18.
- Balance of trade, 28, 41.
- Banking, 35-38.
- Bimetallism, 30.
- Bolshevism, 74.
- Capital, in production, 43;
and consumption, 57; in
distribution, 64.
- Clearing houses, 32.
- Comparative Costs, law, 24.
- Communism, 73.
- Competition, 1, 2, 7, 20.
- Consumption of wealth, 55.
- Co-operation, business, 20;
of labor and capital, 47;
consumers', 58.
- Cost of living, 56.
- Costs, money and real, 46.
- Credit, instruments, 31;
personal, 31; bank, 37.
- Crisis, 15.
- Diminishing returns, and
productivity, 52.
- Diminishing utility, law, 6;
applied in consumption,
55.
- Distribution of wealth, 61.
- Division of labor, 45.
- Economics, defined, 1.
- Economic thought, histori-
cal, 2.
- Elasticity of demand, 10.
- Exchange, domestic, 29-38;
foreign, 38-42.
- Federal land banks, 36.
- Federal reserve system, 35.
- Fiat money, 30.
- Foreign exchange, 38.
- Free trade, 25-27.
- General price level, 12, 33.
- Government ownership, 22.
- Government regulation, 21.
- Gresham's Law, 30.
- Index numbers, 12.
- Industrial Revolution, 46.
- Inelastic demand, 10.
- Interest, 34; in distribution
of wealth, 64.
- Labor, defined, 43; prob-
lems of, 75.
- Large-scale production, 48.
- Luxuries, 56.
- Management, defined, 49;
scientific, 49-51.
- Marginal utility, 7.
- Market, defined, 7; price, 8;
money market, 35.
- Money, 29-31.
- Monopoly, defined, 9; regu-
lation of, 21, 22; price, 10.
- National dividend, 61.
- Necessities, 56.
- Organization, industrial, 49.
- Price, market, 7; competi-
tive law of, 9; monopoly,
10; relations, 11; level,
12, 33.
- Production, analyzed, 43;
stages of, 45.
- Profits, 65, 66.
- Protection, 25.
- Public finance, 70.
- Purchasing power of dol-
lar, 14, 15, 33.
- Quantity-of-money theory,
12-14, 33.
- Rent, 63.
- Single tax, 70.
- Social Democracy, 74.
- Socialism, 73.
- Specialization, 48.
- Speculation, 17.
- Standard of deferred pay-
ments, 14, 15.
- Standardization, 48.
- Substitution, principle, 11;
factor in distribution, 62.
- Supply and demand, 7, 8, 11.
- Tariff, 25, 26.
- Taxation, 70-72.
- Trade, domestic, 19-23;
foreign, 24-28.
- Unionism, 75.
- Utility, defined, 6; classi-
fied, 43.
- Value, and price, 6.
- Wages, 65, 75.

Uniform with "The Brevity Book on Economics" in both quality and quantity, Brevity Books are in preparation on the following subjects:

The Brevity Book on Psychology

The Brevity Book on Principles of Government

The Brevity Book on Fact Analysis in Business

The Brevity Book on Accountancy

The Brevity Book on Business Correspondence

The Brevity Book on Profit Sharing

The Brevity Book on Farm Accounting

The Brevity Book on English Language

The Brevity Book on Industrial Management

Brevity Books on many other subjects will be announced at early dates.

Price, each, \$1.20 net.

Published by
Brevity Publishers

Plymouth Bldg.

Chicago



LIBRARY OF CONGRESS



0 013 608 071 4 ●